

Valuable Free Literature

The following publications—booklets, house-organs, catalogues, etc., are free for the asking, and will be sent to any of our readers upon request of the publisher, or if you check the ones you are interested in they will be forwarded from our Buyers' Directory files.

The Manufacturing Confectioner Publishing Co., 30 North La Salle St., Chicago.

Vanillas.—A treatise on the construction of concentrated vanilla flavors both pure and fortified. Foote & Jenks, Jackson, Mich.

Nature's Finest Flavors.—A discussion of the manufacture of terpeneless citrus natural fruit flavors, in concentrated form, from the harvesting of the fruit to the finished product.—Foote & Jenks, Jackson, Mich.

Merrell-Soule Powdered Milk for the Confectioner and Milk Chocolate Manufacturer.—A booklet describing the manufacture of powdered milk, tests for the buyer of powdered milk, and practical recipes for the candy maker.—Merrell-Soule Sales Corp., Syracuse, N. Y.

Valuable Information About Gelatine.—A 24-page booklet which gives much space to a discussion of gelatine in an impartial way. There are chapters on the legal regulations, pointers on purchasing, testing food value, function and uses of gelatine.—Harold A. Sinclair, 160 Broadway, New York City.

The Story of Delft.—An artistic booklet illustrating the city and folk of Delft, Holland, also how and where Delft gelatine is made.—Harold A. Sinclair, 160 Broadway, New York City.

Facts About Food Gelatine.—A 16-page booklet on gelatine and its uses written by a disinterested scientist and originally published in The New York Tribune. An interesting informative treatise on the definition, manufacture and the diversified uses of gelatine.—Milligan & Higgins Gelatine Co., 222 Front St., New York City.

The Helper.—A 20-page booklet, illustrating in actual colors, the principal lines of confectionery in which Nulomoline may be used advantageously. A short analysis of the characteristics of each kind of candy is given together with a suggestion for the solution of the principal problem in the manufacture of each class of goods illustrated.—The Nulomoline Co., 111 Wall St., New York City.

Nulomoline as Used by the Modern Confectioner.—A booklet containing practical information and formulas on all the principal lines of confectionery in which Nulomoline can be used advantageously. Nulomoline Company, 111 Wall St., New York City.

The Candy Makers' Guide.—A booklet describing Senneff-Herr's full line of candy makers' specialties and a set of formulas for using them. Senneff-Herr Co., Sterling, Ill.

Sugars for Manufacturers.—A pamphlet on the various sugars made for manufacturers with suggestions for using them, by C. W. Nordland.—Franklin Sugar Refining Co., Delaware and Wharton Sts., Philadelphia, Pa.

Refrigeration in the Candy Factory.—A booklet containing a series of five articles on refrigeration and air conditioning and their direct application to the manufacture of confectionery. These articles were written by A. W. Lissauer specially for The Candy Manufacturer and published in our issues of June to October, 1922, inclusive.—W. L. Fleisher & Co., 31 Union Square, West, New York City.

Candy News.—An 8-page leaflet with articles of interest to the trade, issued monthly by National Equipment Co., Springfield, Mass.

Ungerer's Bulletin.—A 16-page semi-technical publication containing articles of interest to users of essential oils and flavors. Issued by Ungerer & Co., 124 West 19th St., New York City.

"SX".—A breezy little 16-page pocket edition, edited by Peabody and published monthly by Essex Gelatine Co., 40 North Market St., Boston, Mass.

General Catalogue and descriptive literature on candy and chocolate machinery.—National Equipment Co., Springfield, Mass.

General Catalogue.—Confectioners' machinery and tools.—Thomas Mills & Bro., 1301-8 North Eighth St., Philadelphia, Pa.

General Catalogue.—Candy machinery, tools and utensils.—Savage Bros Co., 2638 Gladys Ave Chicago.

Working Formulas.—A 22-page booklet giving formulas and directions for using White-Stokes Products in the candy factory. White-Stokes Co., 3615 Jasper Pl., Chicago.

General Catalogue.—Air conditioning apparatus. Also list of 77 other special Sturtevant catalogues covering in detail each item in entire line.—B. F. Sturtevant Co., Hyde Park, Boston, or W. L. Fleisher Co., 31 Union Square, West, New York City.

General Catalogue.—Ideal chocolate and cocoa products, illustrated in actual colors.—Ideal Cocoa & Chocolate Co., 39 Park Place, New York City.

The History of Vanillin.—A 16-page booklet giving briefly the story of Vanillin and its virtues. It gives a survey of the history, uses and advantages.—Monsanto Chemical Works, St. Louis, Mo.

Sweetmeats.—A Franklin Sugar Book of Recipes for making Candies and Bon Bons, Conserves, Cake Icings and Meringues, by Caroline B. King.—The Franklin Sugar Refining Company, Delaware and Wharton Sts., Philadelphia, Pa.

National Certified Food Colors.—This booklet illustrates in color the use of National Certified Food Colors. In addition it lists the complete line of primary shades and blends and gives suggestions for their application.—National Aniline & Chemical Co., 40 Rector St., New York City.

Atlas Food Colors and Flavors



"Atlas" Certified Food Colors All Shades

Certified Combination Colors
Certified Primary Colors
Certified Paste Colors
Vegetable Dry Colors
Vegetable Paste Colors
Atlas Carmine No. 40

"Atlas" Flavors and Extracts

Genuine True Fruit Extracts
Imitation Fruit Flavors
Conc. Imitation Fruit Flavors
Pure Vanilla Extracts
Imitation Vanilla Flavors
Maple Flavors

"BEST BY TEST"

The colors and extracts you use in the manufacture of your product can either add to its ultimate success or be the means of failure.

"A chain is no stronger than its every link."

A poor color or a cheap flavor can ruin the best confection.

"Atlas Brand" colors and extracts are uniform, strong and pure. They are the result of seventy-two years of perfection. Their perfection is recognized by many of the country's foremost Candy manufacturers and their use is employed in every part of the country.

A trial quantity of "Atlas Brand" colors or flavors will be gladly sent on request with the understanding that they must satisfy—otherwise returnable at our expense.


H. KOHNSTAMM & CO., Inc.

First Producers of Certified Food Colors

CHICAGO
11-13 E. Illinois St.

NEW YORK
83-93 Park Place

ESTABLISHED 1851



EDITORIAL

Goodbye, Excise Tax!

At last! The pernicious Excise Tax, which has sapped our profits and discriminated so unfairly against our industry, has been repealed. Thanks to the long pull and the strong pull and the organized seige which has finally resulted in a saving of approximately \$11,000,000 annually to our industry.

Now what are we going to do with this saving. It is a foregone conclusion that some manufacturers will take this occasion to cut their prices and thus lower the standard of profit to new destructive levels without eventually getting any more volume.

A prominent confectionery buyer confided to the writer a month ago that he predicted a "price war" if the Candy Excise Tax was repealed. As we all know the Excise Tax has in many instances wiped out a legitimate profit or has actually gouged into the invested capital. Needless to say the repeal of the tax should reflect itself in added profits well deserved and well earned.

Uncle Sam's Official Candy Maker

"The candy maker is dealing every day with the application of chemical principles though he may not be conscious of that fact," said Dr. Paine before the manufacturing retailers (published in this issue on page 42). It is high time that we, as an industry, knew more of the why of candy making and we are fortunate in having the Bureau of Chemistry undertake such important research work on vitally important phases of our manufacturing problem.

Last month we published the first of a series of articles written by Dr. H. S. Paine and J. Hamilton of the Carbohydrate Laboratory, Bureau of Chemistry, Washington, D. C. The first few articles will be on the subject of improved methods of manufacturing fondant goods. Dr. Paine is a sugar chemist of long experience and Mr. Hamilton is a practical candy maker. This makes an ideal combination for research work and we can expect some very interesting and valuable information from Uncle Sam's candy laboratory if we co-operate with the department closely and show our interest and application.

The National Confectioners' Association has appointed a special committee, of which Herman F. Heide is chairman, to work with the Bureau of Chemistry while they are conducting this research work on behalf of our industry.

We should be very glad to have our readers submit any questions or bring up any points suggested by these articles for further discussion or explanation.

Satisfying America's Sweet Tooth in the South

The Southern Wholesale Confectioners' Association is to be congratulated on its initiative and determination to put on an educational campaign in the south to increase the popularity and consumption of candy. It is obvious that the only way for manufacturers to increase and stabilize their own profits is to increase or extend the market for confectionery. This must be done not by creating more distributors, but by stimulating more consumption. In other words, make everybody like candy *better*.

Note Change of Address

5 Cortland Street, New York. Phone, Cortlandt 5683

The New York office of THE MANUFACTURING CONFECTIONER Publishing Company is now located at 5 Cortlandt Street, in more spacious and satisfactory quarters than we had at 44 Whitehall Street. Mr. R. W. Younie, our New York Manager, is always at the service of our Eastern readers and advertisers. Give him a ring at Cortlandt 5683.

No Admittance to Factory!

Once upon a time a manufacturer, whose name is well known in industrial circles (who for the time being we will designate as Jones Manufacturing Co.), had occasion to take a competitor through his factory. Jones had one unit of machinery which he believed to be an exclusive feature of his plant and which he desired to guard with secrecy. He carefully surrounded his competitor-visitor with members of the firm when passing those particular secret equipment. However, his competitor spied this secret machinery and stopping the party remarked, "Oh, you are trying out this idea, are you? Well, we tried it ten years ago and after exhaustive experiments it proved a failure and here is the reason why," and then he proceeded to tell all the technical points pro and con and prove to Jones the futility of this supposedly secret and ultra-efficient machinery.

"This experience," said Jones, "cured me of the policy of keeping our factory closed to outsiders."

The modern and successful manufacturer today, whose plants are open to everybody, seem to have banked on the probability that for every good idea given out by an open-house policy two good ideas are received. Think it over!

Beg Your Pardon

Owing to a misunderstanding of instructions the display line "La Cellophane" should have been omitted from the advertisement of Franz Euler & Company in our last issue.



Walter H. Belcher
Re-Elected President, National Confectioners' Association

June

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Conventions of the Month and the Newly Elected Officers

NATIONAL CONFECTIONERS' ASSOCIATION

President—Mr. Walter H. Belcher, Walter M. Lowney Co., Boston, Mass.
 Vice President—Mr. F. A. Chappell, E. Greenfield's Sons, New York.
 Vice President—Theodore W. Bunte, Bunte Brothers, Chicago.
 Secretary-Treasurer—Mr. Walter C. Hughes, Chicago.

EXECUTIVE COMMITTEE.

Mr. A. N. Bodey, William H. Luden, Inc., Reading, Pa.	Mr. George T. Peckham, A. J. Walter Factory, St. Louis, Mo.
Mr. Wilfrid I. Booth, Elmira, New York.	Walter Schmidt, Roddewig-Schmidt Candy Co.
Mr. Eugene B. Gimbal, Gimbal Bros., San Francisco, Calif.	Mr. George H. Bunton, The George Close Co., Cambridge, Mass.
Mr. W. C. Dickmeyer, Heit-Miller-Lau Co., Ft. Wayne, Ind.	Mr. C. H. Voegele, The Voegele & Dinning Co., Mansfield, O.
Mr. J. B. Funke, Jos. B. Funke Co., La Crosse, Wis.	Mr. E. A. Wegner, The Cracker Jack Co., Chicago.
Mr. Henry C. Hughes, Hughes Bros. Mfg. Co., Dallas, Tex.	Mr. Frank B. Putt, Brandle & Smith Co., Philadelphia, Pa.

Southern Wholesale Confectioners' Association in Convention at Birmingham, Ala.

President—A. S. Wynn.	Vice President for Mississippi—Jones Spiro.
Vice President for Georgia—Walter A. Brower.	Vice President for Arkansas—Henry G. Leiser.
Vice President for Virginia—W. H. Gibson.	Vice President for Texas—F. E. Wood.
Vice President for Tennessee—Charles H. Fudge.	Vice President for South Carolina—W. D. Drew.
Vice President for Florida—H. B. Thornton.	Vice President for North Carolina—Garland C. Norris.
Vice President for Alabama—George L. Martin.	Secretary—I. H. Clark, Atlanta, Ga.

Associated Retail Confectioners of U. S.

(An Association of Manufacturing Retailers)

President—Chester A. Asher, Philadelphia, Pa.
 First Vice President—Roy W. MacDiarmid, Cleveland, Ohio.
 Second Vice-President—Mrs. Ora H. Snyder, Chicago, Ill.
 Secretary-Treasurer—William D. Blatner, Chicago, Ill.
 Counsel—Tompkins, Blatner & Gavin, Chicago, Ill.

EXECUTIVE COMMITTEE.

George T. Price, Pittsburgh, Pa.	Charles Demenet, Washington, D. C.
Frank G. Shattuck, New York.	Ellwood B. Chapman, Philadelphia, Pa.
Charles J. Meakin, Cincinnati, Ohio.	Walter M. Spear, Portland, Me.
Fred G. Barrow, Providence, R. I.	A. G. Aurontz, Fort Wayne, Ind.

The Biscuit and Cracker Manufacturers Association in Convention at Chicago, Ill., May 26-29, 1924.

President—L. D. Manchester, Sioux Falls, S. D.
 Vice-President—W. T. Bishop, Los Angeles, Calif.
 Secretary—R. T. Stokes, New York.
 Treasurer—A. J. Zimmerman, Milwaukee, Wis.

Confectionery, Biscuit and Chocolate Industries of Canada in Convention at Montreal, May 23-26, 1924.

President—Morden Neilson, Toronto.
 First Vice-President—Colin Currie, London.
 Second Vice-President—L. St. Marrs, Montreal.
 Secretary-Treasurer—C. J. Bodley, Toronto.

EXECUTIVE COMMITTEE.

Wm. Robertson, Toronto.	F. W. Bean, Woodstock.
C. W. Monaghan, Halifax.	T. W. McFarland, London.
A. D. Ganong, St. Stephens.	F. McCormick, London.
P. Vaillancourt, Montreal.	Harvey Shaw, Edmonton.
F. O'Connor, Toronto.	Jas. Ramsay, Vancouver.
H. N. Cowan, Toronto.	W. H. C. MacEachran, Toronto.
E. G. Robinson, Toronto.	Allan Ross, Toronto.



F. A. CHAPPELL
E. Greenfield's Sons
Vice-President N. C. A.



FRANK B. PUTT
Brandle & Smith Co.
Member Executive Committee N. C. A.



C. H. VOEGELE
The Voegele & Dinning Co.
Member Executive Committee N. C. A.

The President's Address

Delivered before the National Confectioners' Association of U. S.,
Chicago, May 20, 1924

by **Walter H. Belcher**

President, Walter M. Lowney Company, Boston, Mass.

WE are meeting here this morning to formally open our forty-first (41st) annual convention which has in effect been already running for two days, because our golf tournament, certainly our exposition, as well as our group meetings of secretaries and package goods manufacturers are vital features of our convention week.

However, this is the first opportunity we have had of meeting as a group and so in behalf of the Association I bid you welcome. It has been our hope this year to arrange the convention program, extending as it does from Monday morning until Friday noon, in such a way that there will be matters of interest for all, and we have particularly tried to have subjects discussed which are really vital in our business and subjects which in themselves appeal to a large number of members.

Our printed program indicates whether or not we have been successful in getting together such a list and upon you will depend a great deal of the success of the meetings and of the discussions, because it takes interest, enthusiasm and a willingness to give and take in order to make a trade discussion worth while. So if the program looks good and you hope to get something out of it, please make up your mind at the same time to put something into it.

Much water has gone over the dam since our last convention and there are many things which might profitably be discussed in my annual report to you. Such of these, however, as pertain to the regular work of the Association will be mentioned by the secretary and so there is little need of repetition.

Candy Excise Tax

Perhaps the one subject which held the interest of most of the confectionery trade throughout the year was the question of excise tax on candy. Ever since our last convention there has been, as you know, a continual effort on the part of the officers and members of your Association to have senators and representatives in Congress informed regarding the unjust bearing of the excise tax on candy. Developments have shown that a great deal of effective work was done by men in the trade with their senators and representatives during the summer and early fall before these men went back to Washington. This work was done thoroughly and carefully. No better evidence of this could be found than was shown at the hearing in Washington early in January before the Ways and Means Committee of the House of Representatives, at which time the question of excise tax on candy was discussed. Our Association was limited to a single speaker for a total period of fifteen (15) minutes. Our



HENRY C. HUGHES
Hughes Bros. Mfg. Co.
Member Executive Committee N. C. A.



A. N. BODEY
Wm. H. Luden, Inc.
Member Executive Committee N. C. A.



WILFRID I. BOOTH
Member Executive Committee N. C. A.

presentation was based largely upon the similarity and competitive features of non-tax paid food products and an exhibit was presented to the committee and discussed in detail. All possible stress was laid on the unfairness of the competition between taxed candy and non-taxed competitive food products. During the hearing, questions were asked on twelve angles of the subject which were not taken up by your speaker, such as "Is the Industry a Profitable One?" "How many Failures in the Industry in 1923?" "Is There an Undesirable Type of Competition from Local Manufacturers and Manufacturing Retailers?" "Who Gets the Benefit if the Tax on Candy is Eliminated?" "As to the Food Value of Candy," "The Proportions of High Priced Candy, Bulk Goods, Bar Goods and Penny Goods," etc. The Ways and Means Committee gave favorable consideration to our argument and the tax bill under discussion left the committee with no mention of candy. The report was accepted by the House of Representatives so far as this item was concerned. The Finance Committee of the Senate, which was familiar with the arguments presented before the House Committee on Ways and Means, concurred with the House in its views on candy, reporting the tax bill without mention of candy and this report was accepted by the Senate with reference to this particular line.

So that candy as an item does not appear in the tax bill as passed by the House or in the tax bill passed by the Senate. There seems to be some doubt as to the final form the bill will take as it comes from the Conference Committee and some doubt as to the attitude of the President if the so-called "Jones amendment" remains and a provision for publicity of tax returns is to be a feature of the bill. The present indications are that the President will veto on account of his stand on these two points.

In any event, whatever the outcome, the candy industry has worked up its case properly, has stated it effectively, and has the satisfaction and prestige of a favorable consideration by both House and Senate. These facts will be of great value in any further consideration of candy tax providing it be necessary for the industry to appear in the future in connection with any excise tax legislation.

THE EXCISE TAX IS REPEALED

The Revenue Act of 1924 which repeals the Candy Excise Tax was signed by the President, June 2nd and will become effective July 3rd. Good work N. C. A.

N. C. A. Exposition

Our exposition speaks for itself. All you need to do is to go down on the pier and check it over carefully to see that it is truly representative of the confectionery supply field. You will remember it was said very emphatically that an exhibition under the auspices of the Association would be a success, and so it is—a success not only from the interest and enthusiasm shown by the exhibitors which has induced them to extend themselves but the exposition is also a success financially. It looks like the forerunner of annual expositions conducted by the Association. It is worth careful examination by every member and every visitor. The allied trades are an essential part of our organization, having borne their brunt of the battle in years gone by, and it is due them that all in attendance at the convention not only visit but carefully inspect the different installations.

Meeting of Association Secretaries

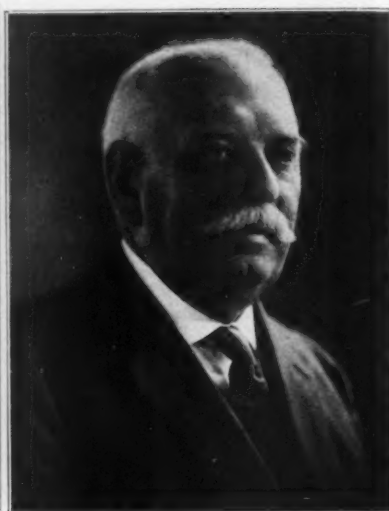
Perhaps one of the most interesting meetings during the convention is the meeting which has already been held of secretaries of local associations. It is said "There is nothing new under the sun," but the meeting of these secretaries



W. C. DICKMEYER
Heit-Miller-Lau Co.
Member Executive Committee N. C. A.



E. A. WEGNER
The Cracker Jack Co.
Member Executive Committee N. C. A.



J. B. FUNKE
Jos. B. Funke Co.
Member Executive Committee N. C. A.

is a new convention feature. Those who have studied the scope of association efforts have come to realize that while there are many lines of effort that can very well be carried on by a national association, there are still many things to be considered in an industry which are local in character and can only be handled by local associations.

Matters of tax, matters of tariff, matters of trade mark checking and registration, matters of general publicity and many other things, too, can and should be very definitely handled by our National Association. There is a breaking point, however, between these rather obvious general association matters and local situations which call for local remedy and local correction, and so it seemed worthwhile to have a meeting of the secretaries of the various local manufacturing and trade associations and I will leave for the individuals who attended to say whether or not that meeting was a success.

We manufacturers in New England may hear through various sources of information of situations which are developing in New York, Philadelphia, Cleveland or elsewhere. Some of us get around the country occasionally and learn of such things ourselves, but I can conceive it should be the duty of local associations to have their official representatives get together by zones or sections and become acquainted with things which are the interest of all and the business of all. I can conceive it quite possible and desirable that the secretaries of say the New England, New York state, Philadelphia and Baltimore associations get together at least bi-monthly with one meeting in New York, another in Philadelphia, the next in Boston and so on; and through the medium of information exchanged at those meetings to become personally familiar with trade conditions in the local and more competing sections and consequently

be able to take back to their own membership facts which are obtained first-hand.

I think it entirely conceivable for a representative say of the eastern secretaries to attend the annual meeting of the Midland Club and to carry back to the eastern secretaries and so to the eastern membership as a whole, the point of view and the enthusiasm which radiates from the meetings of the Midland Club. I think it entirely probable that there would be exciting competition for an opportunity for an eastern or a central western delegate to go to the convention of the western confectioners, or for both west and east to go to a southern convention.

These meetings might mean a fine trip and a good time, but more than that would mean a broadening and a continuity of trade contact and there is hardly anything more important right now in this era of trade uncertainty than the proper sort of a trade contact which should embrace, if possible, the whole industry throughout the country. These meetings of secretaries, if properly worked out, can contribute greatly to the general welfare of the industry and probably no one is more ready to agree to this point of view than the secretaries themselves who realize the weaknesses of their sources of information, probably sometimes feel a little stale on their jobs, and who would all be benefited personally and industrially by visiting the other fellow on his home ground.

Questionnaires

In our group meetings of yesterday we discussed the subject of "Questionnaires." All sorts of questionnaires come to a business man nowadays, not only with reference to his own industry but with reference to problems being worked out by other industries, advertising agencies, and economists, until some manufacturers have, I think, gotten to a point where

they will not be bothered to answer anything. That of course is an unfortunate situation for such questionnaires in the candy business as should be answered. Perhaps a reply representing fifteen or twenty per cent of the list is to be considered favorable, but for the purposes of tabulations or of drawing conclusions, fifteen or twenty per cent is partially negligible.

It is still a fact that the candy industry knows too little about itself and that its representatives when they are faced with the necessity of appearing in behalf of the industry and of talking facts have too little real information to back up their statements when the discussion comes to volume of production, volume of sales, number of people employed, etc. The industrial census figures taken by the government this year will show a compilation of candy and from that we should be able to get some better information than we have had.

I have personally been opposed to the sending out of questionnaires from the secretary's office during the past year in the light of our experience in getting replies to the questionnaires previously sent. I do believe thoroughly in the idea that the industry should know about itself and the only way to get such information is to have various simple, sensible questions asked of manufacturers, questions which they can answer from their records and questions which they should be willing to answer. I sometimes think that the only basis on which to appeal to a man is the basis of self interest to him, because if a manufacturer really grasps the idea that in answering a simple, comprehensive list of questions he is benefiting himself through the information that will come back to him in compilation, he will be willing to take the time and make the effort to answer the questions. I think that one job of local secretaries might be that once a form of questionnaire is passed upon by our executive committee, to sell the idea of answering these questionnaires to the various members of the local associations, and I can't think of any better line of approach for our Association to use in reaching manufacturers than through these local associations and local secretaries. Ten, fifteen or twenty per cent perhaps, of our members will answer an inquiry, but the rest of the answers have to be dug out. If the basis of the questionnaire is logical and if the presentation to the secretaries is right, it ought to be easily possible through that agency to get almost one hundred per cent reply. I sincerely hope that succeeding administrations of our Association will accept this point of view and be willing to devote the time and keep the contact through the local secretaries.

Chemical Research

The Bureau of Chemistry in Washington is doing a lot of research work on candy. Knowing of this, a committee of three was named from the executive committee with Mr. Herman Heide, chairman, to form a point of contact between the Bureau of Chemistry and this Asso-

ciation. It is undoubtedly a fact that many matters on which the bureau may be working have been previously considered in various laboratories and in the factories themselves of association members, and it is probably also true that many matters which are being considered by individual manufacturers have been discussed and a point of view reached on these items by the Bureau of Chemistry.

A visit to the laboratories of the carbohydrate division of the Bureau of Chemistry shows samples of candy in various places under observation for different results, and one is impressed by the fact that the bureau is paying some real attention to candy. The questions for consideration which were submitted by our committee were broad enough in scope, sufficient in number and intricate enough in character to show the bureau that the industry has some real stiff problems confronting it. I personally feel that this contact can be made of great value to the industry and feel that it should be followed up thoroughly and carefully by a contact committee of our Association. It is hardly conceivable for this line of experimentation to be carried on by the Bureau of Chemistry and not have our industry both contribute its share of help through its experience, and benefit from the results to be obtained. It seems to me like a highly desirable acquaintance to be cultivated and I hope our membership will feel the same way.

Candy Gambling Devices

Nothing provokes the average person so much as to see a youngster treated unfairly or in such a way that he does not get a run for his money. This feeling has evidently not been shared by all manufacturers of confectionery because of the various styles of candy packing which have been put out primarily for sale to children and with the element of chance a vital factor in the sale of such goods. At one time in New York over one hundred thirty different styles of penny gambling adaptations were on the market.

Little need be said as to the ethics of these propositions and nothing at all can be said in favor of them except the lame excuse that they do produce poundage and sales. When manufacturers find it necessary to lower the standards of doing business in the trade to such an extent that they are willing to run the chance of putting out goods without designation of name or of location of the manufacturer, are willing to put the sort of material into goods that many of these gambling set-ups use, and are willing to go out and base their sales primarily on the plan of cheating the kids, it is time that the people who were responsible for this type of merchandising put up their shutters or have someone forcibly restrain them from manufacturing and selling these schemes. Our Association has gone on record against them and various local associations have done the same.

In the correcting of these schemes, the Na-

tional Association has been much at a disadvantage because the general laws governing lotteries do not apply to the style of packing in which these goods are shipped, and because the administration of local law is a matter for local supervision. Attempts of local associations to control the manufacture and sale of these gambling set-ups have been partially successful in some sections, even in the face of sales pressure from outside manufacturers. The effect of these penny lotteries on standard merchandise distributed through regular channels is most damaging from a sales standpoint, and if this were the only unfavorable factor, the case against these schemes would not be as strong. When, however, a sales scheme depends for its success on the cheating of the kids, an entirely different situation presents itself.

The New York Association finally hit upon a plan which has been more successful than any other and which has indeed worked out satisfactorily. It so happens that one of our associate members is an alderman of the city of New York, which in itself furnished a starting point for a clean-up in New York of the sale of this penny lottery candy. Because of the fact that Mr. George Harvey is an alderman in New York, he consequently has the opportunity of interesting the district attorney, the police commissioner and other officials, and because he knows enough about the candy situation in general to state the case fairly and completely, it has been possible to stage a clean-up in New York; and with this as a beginning, similar clean-ups with attendant newspaper publicity have been possible elsewhere. Many instances can be cited now of places where the police have definite instructions to stop the sale of so-called "chance candy," and an interesting factor of the campaign is the willingness and co-operation of the policemen themselves because they seem to take it as a personal grievance that the youngsters are being trimmed on these chance candy schemes. At the secretaries' meeting last evening this subject was one of the principal items of discussion. I am not touching on it very much in detail now in the hope that there will be an opportunity later in our sessions for a fuller presentation of the subject before the convention, together with a statement of just how the matter is being cleaned up in New York and perhaps elsewhere.

Business Conditions

Various business authorities and economists differ in their current views of business. One says that we are going through a period of mild readjustment but that 1924 consumption is not likely to decline sharply. Another says that unless there are adverse political developments, the business outlook for the balance of 1924 is at least normal. Still a third says that there is no panic possible and no severe depression to be expected, that good profits will be shown by men who realize that readjustment is ahead. And still a fourth remarks that for the balance

of 1924 business activity will show a slow decline in the face of various readjustments. So then, you see the trend of all these opinions is about the same—mild readjustment, relatively slow business. Another makes the statement which is reasonably obvious, that there will be opportunities for those who can produce at low cost and who have ready money.

These same authorities, with reference to commodity prices, offer these opinions. One says that in certain basic commodities we are in a buyers' market, for instance, steel and lumber. Another suggests that although the development is as yet uncertain, there are indications of near-by stabilization of prices. Still a third suggests that a conservative inventory and a hand to mouth buying policy should react to advantage—all of which under the circumstances is reasonably obvious.

On production these same authorities seem to agree that a slow decline of general productive activity is in sight. Other observations which are made are these. The final consumption of goods in the present year should not show a more than five per cent decline over 1923, which checks with another authority who says that the wholesale and retail trade is in good total volume but of very spotty character; and this last remark probably states the situation in our own industry, particularly with reference to business being spotty. Excise tax payments on confectionery for the first two months of 1924 showed a gain of fourteen and six-tenths per cent. Similar gain in excise tax payments for the first three months of 1924 over 1923 was only 6/100 of one per cent which is a fairly good yardstick for the business situation for the first three months.

As to what the balance of this year may have in store for this industry or what may be the conditions during the coming year are matters of grave speculation. To say that conditions in the industry are upset is putting it mildly. How the industry will work out its problem satisfactorily is a difficult question. (We are all familiar with prevailing trade practices and I think we realize that what is needed, perhaps more than any other one thing, is some sort of person with powers comparable to Judge Landis in baseball, to do a little regulating. Of course it is the easiest thing in the world to criticize and the hardest thing to offer something really constructive.

But, it is a fact that through the desire for business, induced by idle plant capacity and a general falling off in business, measures are resorted to which are far from conservative and profitable. I have made the remark that the manufacturer whose business runs along quietly and steadily and perhaps who gets his impression of outside business from his retail or jobbing friends does not know much about the industry, and would get the surprise of his life if he could arrange to be a fly on the wall in the office of some of the buyers for chain stores or

department stores and learn of some of the propositions that are made by candy manufacturers to these buyers. Then in truth he would learn something about the candy business, would come to know of the straining efforts that are made to get orders, to keep plants running, organizations intact, and perhaps to make a profit. There are candy buyers who take advantage of these situations and there are others who realize that a source of supply which is worthwhile and desirable cannot do business except at a profit and are consequently reasonable in their demands.

It is one thing to play with your profits, and decidedly another thing to play with your costs. The man who knows his costs and protects them may, under some circumstances, justify himself in playing with his profits but he does not attempt to justify himself in playing with his costs.

It appeals to me, and of course it does to you, that low stocks and well controlled inventories are two of the factors to be earnestly striven for. You will agree too, that planned sales over a period should go hand in hand with a profitable production schedule, that those items which a plant can make to advantage ought to be pushed and sold to advantage, and that the sales items which a business has established through a term of years should be continually watched for methods of saving in production.

Specialized Manufacture

In the candy business as in many others, perhaps in fact even more so, we are getting to the point of specialized manufacturing. Many instances will occur to you immediately of the specialized plant and the specialized or single track sales effort, and you will have no difficulty in seeing why many of these specialized businesses are successful. Time was in the candy business when everybody made everything, but now the plants who make everything find themselves, I dare say, up against specialized manufacturers of each item and consequently are confronted with the problems of marketing many things, and of trying to put one hundred per cent effort on a dozen lines against the fellow who is a single track specialist.

There will always be general line manufacture but the number of single track specialists will continually increase and so the merchandising of candy as a whole will be improved, because of this very idea of specialization and because individual plants must stand by their ability to make and sell a single item, or at most a very narrow line. So then we have the prospect of more intelligent merchandising by manufacturers, a greater knowledge of candy by the consuming public, an increased consumption by reason of this greater knowledge, and with all, probably a more favorable price to the consumer by reason of better planned production. This seems to me to be the tendency of things at the present time and I am sure it is no isolated point of view.



WALTER SCHMIDT

Roddewig-Schmidt Candy Co.
Member Executive Committee N. C. A.

The New Era in Our Industry

It is only within the past few years that candy making has come to be looked upon as a scientific proposition worthy of real study. It is only this year that the Government has planned to compile candy statistics separate from ice cream and other items. It is only within a comparatively few years that men who are headed toward the candy business either by family ownership or by preference, have made a serious preparation for entering the business, through scientific study of mechanics, of chemistry, of financing or of merchandising.

These boys, with their scientific training and with the background of an ability to reason and to analyze, will bring an influence into the industry that ultimately will be of the greatest benefit because it will tend toward stabilization, toward an accurate knowledge of costs of production and costs of distribution. There will be a breadth of point of view and an appreciation of the combined business factors of the industry which is possible only by growth and by the coming of these things which time alone produces.



Candy Credits

An address delivered before the National Confectioners' Association, May 21, 1924

by **G. C. Haislip**

Credit Manager, Williamson Candy Co., Chicago



WHEN Mr. Hughes asked me to address you on "Candy Credits," I was a little taken back, as I could not fail to realize that there are so many wiser heads than mine, who are more qualified to do justice to the subject.

Egotism being one of the chief requisites of a Credit Man, however, I could not miss this opportunity to take advantage of your good nature.

Interchange of Credit Data

A good many members of this Association have written or spoken to Mr. Hughes about operating a "reciprocal slow-account list" through the Secretary's Office. The idea is for those members interested, to report at stated intervals to a central bureau, those of their customers who are slow in their payments, or with whom credit difficulties have arisen. This central bureau would tabulate the experiences of all the contributors, and send out completed reports.

This idea is not new, as the Confectioners' Division of the Chicago Association of Credit Men—of which I have the honor of being Vice Chairman—is already operating a similar plan. To attempt to make this plan national in its scope, would—in my opinion—greatly curtail its usefulness, because it is primarily a plan for local use.

You can dig a satisfactory hole with a hand-shovel, up to a certain size; but if you want a larger hole, a steam-shovel is advisable. It would seem that more general patronage of some system already organized and in operation—say, such organizations as the Interchange Bureaus of the various branches of the National Association of Credit Men—would give us greater benefits.

The Science of Granting Credit

Since the substitution of currency for the old system of barter, "Credit" has become increasingly important—until at the present time it is estimated that 90% of the business in this country is conducted on a credit basis. The "granting of credit" has become a science with well recognized, fundamental principles. Yet, it is amazing the amount of ignorance that is commonly shown, by credit men and by others, of these same fundamental principles.

Overstrain on the fabric of credit is one of the principal causes of our financial panics and business depressions. The worry, suffering and loss, caused by such conditions, are matters of common knowledge, and need no explanation. The troubles of 1920 and 1921 are still too fresh in our minds.

Friends, the strain on credit, caused by over-inflation, is not the result of any one particular action, no one colossal blunder by any individual or group of individuals. An innumerable number of small blows, is what causes the credit structure to crack. If every business, if every credit man, extended credit only on the well-recognized principles of credit, and refused to be stampeded into over-extending themselves—merely because of boom times—there would be no necessity of having the long swing of the business pendulum from one extreme to the other. Don't misunderstand me. We are all equally guilty—the big man, as well as the little fellow.



GROVER C. HAISLIP
Credit Manager, Williamson Candy Co.

A Situation Peculiar to Our Industry

In the confectionery industry, we have a situation peculiar to ourselves. Although we are the sixth largest industry in the United States, we are woefully behind the others—both in merchandising and in credits.

The products of the shoe industry are put into the hands of the consumer through a shoe store or a department store. The drug industry reaches the bulk of its consumers through the drug store, and so on down the line. Each of these industries has its own particular outlet for the majority of its products.

The confectionery industry must reach the consumer through a variety of retail merchants. The retail store handling only candies, is only one of many sources of distribution. People buy candy at the drug store, the grocery store, the parks, the amusement places, the theatres, the pool rooms, the billiard alleys and countless other places.

What does this mean? Simply, that from the standpoint of credit, the wholesaler or jobber has a large number of irresponsible people whom he has to supply with merchandise. This situation can be handled. It is being handled very successfully by some houses.

However, far too many distributors let their eagerness for sales overcome their credit precautions and, as a result, sooner or later, impair their own credit with the manufacturer, whose credit losses are correspondingly increased.

Competition in Credits ! !

One of our salesmen came back from a certain city in Oklahoma recently, and related a conversation to me that he had with a prominent retailer there. Our salesman said: "I am mighty glad you disposed of that large order I sold you through Smith & Company. I want you to double that order now. As you received

your money in two weeks' time on this first order, suppose you let me have your check for it, to turn over with this new order to Smith & Company?"

The retailer replied, in surprise: "Why, we never pay Smith & Company under sixty days. All the jobbers are wild to sell us; so if Smith & Company don't want the new order without a check, why put it through some other house. Any one of them will be glad to have our business."

This is not a parable. It is a fact. Today I received a notice in bankruptcy from one of the wholesalers in that city. I don't blame him for failing. The wonder is that he lasted as long as he did.

Folks, this situation can, and must be, remedied. There is only one remedy, however, and that is "credit education." The manufacturer and distributor must work hand in hand to this end. Don't ever forget, "There is no competition in credits."

Fundamentals of Credit

By means of correspondence, by newspaper and magazine articles, by word of mouth, through our salesmen, let us preach the "fundamentals of credit":

No credit beyond that warranted by the customer's financial strength.

Terms of sale must be observed.

No extension of terms, except those specifically arranged for to take care of particular cases.

No additional credit, when there is a past-due balance. Pay up before receiving more merchandise, not after.

On small or weak accounts, or moral risks, one bill at a time, until they have improved their condition.

No discount allowed, except that earned.

Permit me to elaborate on these fundamentals a little:

Gauging Financial Strength

In just what way should we gauge a customer's financial strength? Without going into too many details, we should pay attention to the following ratios, which can only be gathered from a financial statement. Incidentally, it is always wise to secure a financial statement on every customer, if it is humanly possible to do so. If not from the mercantile agencies, then direct.

Compare the ratio of current assets to current liabilities. By current assets, we mean those assets consisting of cash and accounts receivable, or other assets that can be quickly turned into cash. By current liabilities, we mean all indebtedness for merchandise purchased, loans from banks or individuals, unpaid taxes, etc.

To be a safe credit risk, current assets should exceed current liabilities by a ratio of two to one. Now, this ratio is modified by particular conditions of the business under consideration. Credit judgment is the only thing that can protect you in such cases. This ratio indicates the "margin of safety" to the creditors.

"Compare the total debt to the net worth, which ratio indicates how well the merchant is protected against loss, and also whether the creditors are financing the carrying on of the business to any great extent. No set ratio can be given on this point. Your judgment must be your guide."

Compare the accounts receivable to the merchandise inventory, to indicate the rapidity of turn-over.

Compare the monthly sales to accounts receivable, to show how the merchants are collecting their money, or what terms they, themselves, are extending.

There are many other ratios of value; but these are some of the principal ones.

Enforcing Your Terms of Sale

When you ask that "Terms of Sale" be observed, you must remember that your own costs and profits determine what these terms shall be, and if you permit continuous violations of your terms, you are increasing your costs, and correspondingly decreasing your profits. Let your customer know he is taking a portion of your profits, when he violates your terms.

On the due-date of an invoice, the money called for by such invoice is no longer the property of the buyer; it belongs to the seller.

Do not permit customers to willfully violate your selling terms, without protest. He has no more right to do that, than he has to borrow your money without asking permission, merely because the opportunity presented itself.

There are cases that need special extensions of time. Let them write in and arrange for such extensions, before your invoices are due.

Never take the attitude of begging for what rightfully belongs to you. A firm request for money due you, is always best, and inspires the respect of your customer. Of course, you understand, firmness does not necessarily mean curtness.

When customers want additional credit, and they have past-due bills on your books, don't accept the hypothesis that to refuse it, is to cause a breach with your customer. This hypothesis has been thoroughly exploded.

If you advance additional credit without payment of the old account, you only postpone the breach, and when it does come, he owes you just that much more money, to be collected or charged off.

On weak accounts, or moral risks, train your salesmen to act as collectors. Have them first secure the additional order, and then quite incidentally ask the merchant for a check. A careful study of the customer's personality by the salesman, is always advisable, and on accounts of this nature, almost obligatory. If the salesmen are properly impressed with the importance of this work, they will do it very well.

If your salesmen do not call often enough to follow this procedure; then have the customer understand, in advance, that your terms to him are "one bill at a time."

Cash Discounts

It seems to me that there is considerable misunderstanding in our industry of the theory of cash discount. As I see it, a cash discount is a premium offered for the payment of cash with order.

Now, the merchant selling customers at a distance from his place of business, felt it only fair to extend the privilege of the cash discount to such customers. To cover the time needed for modern bookkeeping, ordinary deliveries of freight, mailing invoices, etc., *universal custom* has allowed a period of grace, in which to complete the payment of cash. In our industry, this period is quite generally ten days.

In my opinion, the fact that this period of grace is given, does not alter the fact that the discount is allowed as a premium for the payment of cash with order. Therefore, when discounts are deducted on payments made after the period of grace, the fundamental principle involved has been violated, and the discount should not be allowed.

There is not a more vexatious question in the whole science of credit granting, than this one of "discount." It seems to me that a more thorough, general knowledge of the theory on which discount is granted, will do much towards counteracting the unpleasant reaction of

(Continued on page 44.)

Use of Chocolate In a Candy Plant

An address before the National Confectioners' Association, May 22, 1924

by **Theodore W. Bunte**

*President, Bunte Brothers, Chicago
Vice President, National Confectioners' Association*



I CANNOT say that I feel our president has been as successful in selecting the speaker as he has the subject, for the reason that I am neither a scholar nor a scientist. But I have worked with my whole heart and soul in the confectionery industry ever since boyhood, under the jurisdiction of my father, and it has been my pride and my ambition to accomplish what he always told me was the essential thing in the candy business, and that was quality. "Without quality," he said, "you do not get anywhere."

At previous meetings we have heard the subject of quality discussed, and I have left the meeting feeling, I believe, as everybody else felt, that quality was the only thing; but it seemed about two months after that that many had forgotten what quality was, from the merchandise they sold. But I am not going into that. I am here to try to tell you, and to give you the benefit, if I can, of what has come out of my experience and my ideas in manufacturing and in the use of chocolate in our plant.

The Chocolate Industry

I believe we will get a better acquaintance of the importance of chocolate as an article of commerce, if we pause for a moment and consider the world's consumption of the same. I have no recent figures to give you, but I do know that in 1913, the year before the great war, the world consumed in excess of 500,000,000 pounds of raw cocoa beans. It is safe to say that this figure has been greatly exceeded since that year. Now, I am only going into this to show you what cocoa means to us.

Since 1913 America has become the greatest consumer of cocoa. The total imports for the year ending June 30, 1917, amounted to over 150,000 tons, valued

at \$40,000,000. In 1918 they had increased to 180,000 tons, valued at \$42,500,000. The bulk of cocoa imported into America is consumed in our country, though, during 1915 and 1916 there was an exceptionally large re-export trade to Denmark and Sweden; but the re-export trade to Europe fell off considerably during 1917. The imports into America from the chief countries during the years ending June 30, 1914 and 1918, were (and I think this is very interesting):

Imported into America from British West Africa in 1913, 70 pounds; the reason of this small amount is that it must have been a sample. In 1917-18, we imported from the same source 887,474 pounds of cocoa. From Brazil in 1913 we imported 230,984 pounds; in 1917-18 we imported 815,670 pounds.

Now, reading it off that way means that you go by it in a hurry. But just stop and think that in 1913 you used 230,000 pounds from Brazil and in 1917-18, nearly 900,000 pounds, of the same bean. It simply goes to show you that an article consumed in such enormous quantities is not a luxury, but it is a food, in every sense of the word, and it is up to you and me to treat it with respect.

What Is Chocolate?

Before we proceed, let us ask ourselves:

What is chocolate?

What is plain sweet chocolate coating?

What is bitter-sweet chocolate coating?

What is milk chocolate coating?

What is chocolate liquor?

You all know what chocolate coating is; you make a line of goods covered with chocolate coating. It is up to you the quality of merchandise that you want to make, and the reputation of your goods depends upon the quality of the coating. I have often argued the point that it was unfair for a man to say, "I use a better coating than you do," when he does not know what is in that coating. I felt that it was a very good thing when our pure food law came along and said, "You have got to make a coating up to a certain standard—that is, speaking of purity—and if you don't, you can't call it coating." I think that was one of the best things that ever happened to the chocolate industry.

Now, I am going to read a little notation I have here for fear I will forget it. We are only touching the high spots.

Butter Fats in Coatings

Most of the difficulties experienced in the handling of chocolate are due to the peculiar nature of its butter fat. It is the source, freshness and manner of distribution of this butter fat that determines the taste, covering and keeping qualities of the chocolate.

In order to understand the nature of chocolate we must look at it from the point of view of an emulsion. Milk is an emulsion of fat and water. If allowed to stand still for a time the fat will rise to the surface and form cream. If milk is homogenized the fat is

broken up into such small bodies that it will remain suspended in the water for quite awhile without rising to the top.

Now chocolate presents exactly the same case, with the exception that here, instead of water, we have milk, milk solids, cocoa and sugar. In every phase of the work, in all our precaution of what to do and what not to do, in all our temperature control, we aim to incorporate this butter fat into the chocolate, split it and refine it into the smallest possible particles and make it stay suspended in the mass without rising to the surface.

Temperatures

Temperature control is of the utmost importance, with the general rule to avoid extremes of temperature. Why? Because the melting point of cocoa butter is 90 to 92 degrees Fhr., at which temperature it becomes fairly heavy oil. A higher temperature makes the oil very thin and therefore more likely to break through the mass and come to the surface.

Now, supposing the chocolate manufacturer took all of these precautions to produce a perfect coating and the consuming manufacturer, instead of remelting it at 100 degrees, heated it to 125 or 130. This is not always done intentionally—the superintendent will come in and it does not look to him as though there was enough heat turned on, and he will give the steam a turn, and the first thing you know, it is up to 125 or 130. In a few minutes the chocolate has returned to its original raw condition and all the efforts of the chocolate manufacturer are lost. I would suggest that you take a little piece of the chocolate and overheat it and then compare it with the other; in this way you will see what you have got. And once you have overheated it, it is difficult to get it back to its original. Don't misunderstand me. I do not mean that you cannot use it, but I mean that you have an inferior piece compared to what you had. Overheating is one of the severest things you can do to chocolate coating.

At one time I had the pleasure of working with a man in Europe, and it took him three weeks to find out what degree of temperature was the best for eating chocolate; he took samples of it every few hours. That is the importance they attach to chocolate temperatures in Europe. And they make some very nice goods over there; the proper temperatures for chocolate, I think, should be called to your attention. I do not know of anything outside of foreign fat that will hurt chocolate or be more detrimental to chocolate than overheating.

We dip around 88 degrees. Of course you have got to take into consideration your drying conditions. I find best results around 88 degrees, but there may be a variation of one or two degrees, up to 90; but the drying conditions have got to be taken into consideration with the temperature. Many, I think, make the mistake of drying chocolate—they want as cold a temperature as they can get. Now, my experience has been that when you do that, you simply chill the chocolate; in other words, you close the outer pores, or, you close the surface of the chocolate on your heat, that is, it remains in the centre of your article, and just as soon as that article is permitted to get out into a little higher temperature, why, it is only natural that it will start to perspire, and when it does, it gives you dull goods. I have found that with a little higher temperature and a little longer time to dry is very much more satisfactory. This has been my personal experience.

Careful temperature control is especially necessary in handling milk chocolate which contains a mixture of cocoa butter and butter fat, each one having its own character and its own melting point.

Relative to chocolate liquor, I understand there is a

vast quantity of this article consumed by both confectioners and bakers, and I maintain that the purchasing basis of this article should not only be based on the quality of the bean used, but of just as great importance is the percentage of cocoa butter that this liquor contains.

Storage and Handling of Coatings

The coatings or ingredients of the coatings having been purchased with all care and consideration, the confectioner must now safeguard the quality of the product he has purchased. In the candy plant chocolate coating can hardly be improved, but it can readily be allowed to deteriorate and even spoil. Chocolate is exceedingly susceptible to foreign odors, and if broken packages are exposed to bad odors, the chocolate will soon possess a similar taste and flavor. It is always best to keep coatings in unbroken packages in dry, cool rooms.

Rapid changes of temperature, particularly from very hot to cold, generally causes a graying of the coating (due to separation of cocoa butter), which brings with it a loss of aroma and a deadening of the taste. Careful reworking or sometimes even melting of the coating for dipping or enrobing usually restores the original appearance, taste and aroma. When, however, chocolate has become musty, or has acquired a foreign flavor, reworking will only in rare instances, remove this objectionable condition.

The Question Box

There have been some questions handed in. I find this one:

"On 5 cent bars how is weight controlled to avoid excessive overweight at times?"

I would say, if you carry your chocolate at the same temperature you started out with, if that was right, you will not have much trouble.

A Voice: How do you do that? How do you keep it that way?

Mr. Bunte: Do you refer to hand dipped or machine dipped?

A Voice: Machine.

Mr. Bunte: There is skill in running a machine, isn't there—have you thermometers on your machine?

A Voice: It will fluctuate a little.

Mr. Bunte: Yes, it will fluctuate at times, a few degrees. If your chocolate gets cold sufficiently so that you get on an unreasonable amount, or, more than you think you ought to have, it means that someone has been negligent. Of course you have got to make exceptions. It is pretty hard to control the dipping so that the 100th piece will be just like the first; but there should not be too great a variation there.

I wonder if some machine operators don't depend too much on their heating devices? I find it very much harder to control chocolate by steam or hot water than I do by warm chocolate. Of course you have got to have your machine warm to start with. Before I start, I see that I have the proper temperature of the chocolate and from there on I do not use any valves, that is, in the way of steam, because, once you get too much heat in there, you can't get it out and you might as well stop and save yourself work. On these five cent bars, if they have too much weight, your workmen probably don't watch their machine close enough.

Here is a good one: "What causes bubbles on or just under the surface of machine dipped goods?"

I can't answer that because I don't know. I would not say the fan does it, because the fan is supposed to blow the chocolate off. We are troubled now and then with hand dipping. You may see a bright hard bubble, and if you break it, you will find that it is hard. But

(Continued on page 39.)

Address by Harry A. Wheeler

Formerly President of the Chamber of Commerce of U. S.

Delivered before the National Confectioners' Association of U. S., May 22, 1924

THE general public knows very little of the technical side of your business, or the business of any industry. The days were in the not far past when nearly all of our business was done in a rough-hewn sort of way, when we were developing the resources of our country, when we were wasting more than we saved in the passage of our people across the continent. When we were subduing nature, and doing all of these things, we were doing that in a rough-hewn way; while today the wealth of the United States is being increased by leaps and bounds by the technical details that are being given to business. The commercial laboratories are finding not only ways and means of using the commodities that were used in production before, but they are finding also out of the waste, by-products that are adding more and more to the wealth of the country than the conversion of the raw materials into the finished product that we started with.

There are sixty billions of dollars invested in the United States of America in enterprises in which the laboratory is a distinct and direct factor concerning its prosperity and the effect of the business and its relation to other industries.

Chemistry's Contribution to Industry

I can remember in the organization work that we have been engaged in, when the first great meeting of chemists was held in the United States, and the European chemists came over to talk to us about their activities; and at that time the number of commercial chemists that we could summon together in this country was pitifully small. Our universities had not then undertaken the great graduate courses that are in existence today. This group of men gathered together in an international meeting at that time represented the best thought and best minds in commercial chemistry and chemistry of that time; but it is not to be compared with what we are doing today, showing that with the development of the business in the United States, we have passed the day of easy progress along the line of wasting the natural resources, into an intensive study in the inner fields of research in every industry. The public knows little of the development of your in-

dustry. So it is with the other industries, in the oil industry, the steel industry and everything else, in the institutes that have been created, and in the laboratories that are for the use not of a single business, but of the entire industrial world around us.

In this very room, not many months ago, there was a meeting regarding the establishment of a foundation and an institute where there would be careful analyses supplied to the commercial sciences that could be brought to bear upon the commodities that were used, the best way to save, the best way in which by-products could be turned into that industry and brought down to the entire industries, and where the man in their own private laboratories had found means of doing things that were not known to others. They brought things from their own industries; they laid them before their chemists and made possible the program of development which increased tremendously the wealth of the product, the character of the product and the future of that particular industry. And that is where, in this country, we are gaining so greatly today. That is why, no matter what comes, with respect to our competition in the markets of the world, this country, because of the science that it is applying to business, will, as the competition comes, be able to meet any competitive situation and to have the markets of the world at our door, insofar as we have the intelligence to cultivate our relationship with the markets of the world and make possible the steady stream of our American products into Europe and into South America. That is what I have come to talk to you about.

Business Vision—Large and Small

I think we are all interested in prosperity. We are all interested in sustaining prosperity; at least we all claim to be. How far we are interested in that prosperity which extends beyond our own counting house I do not know. I am inclined to believe that our vision is circumscribed practically to the four walls of our business, to the next store and in our own building. Every day we measure the progress of prosperity largely by those factors that are nearest at hand. That is not an unusual condition, of course. Some of us are tied down so closely that we do not get the opportunity to have a vision apart from our own affairs. Some of

us are inclined to be very intensive in our own affairs, to give very little of our time and thought to the general welfare, thinking more of the development of our own interests. We lost sight of the fact that one must, by intensive study of one's own business, come to about the same position that a man would come to if he intensively studies his own character or his own physical condition. There is a certain morbidity that necessarily follows the trend of intensiveness, the inner look instead of the outer look.

Coming together in associations of this kind as you have, in all the years you have been coming together from the first meeting, when you held some degree of doubt as to whether you were in your right place, associating with your competitors, and later on you came to find men of the same type as yourself, good men, men who had been misrepresented to you, very likely through the selling force of an establishment, whose excuses were that there was a devil at the other end that made you do what you were doing (and you were the responsible man, the salesman, of course, was the servant who had been carrying out your wishes), and there naturally came into the trade a feeling of distrust, and dislike and enmity and conflict, because of the lack of knowledge.

The associations have done away with all of that. Today we have got to take in our own analyses of business the larger view. It will do us little good if we confine ourselves to the intensive study of our own establishment. That goes a certain distance; that is of value; but it is not the final value. And the interest which business men must today show in the larger aspects with general business, is the interest of associations like this which will awaken and will keep alive, and in consequence bring prosperity and improvement to business that could not be brought in any other way.

A Healthy Second Liquidation

My feeling is that in this year, and I know it from the number of industries that we are dealing with in our bank every day—we are not altogether satisfied with the general business condition. There are different analyses of what is going on. Perhaps no one analysis will fit every case; but as we see it, looking at the widespread industrial life of the country, as we have the

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opportunity to talk with men who are very aggressive in their work, and to watch a very large number of concerns in all lines of business, and in all parts of the country, we are bound to form a more general conclusion as to what is on in this year 1924 than might be had from the consideration of business confined within four walls. This is our conclusion then, that we are undergoing, in 1924, the second liquidation. The liquidation of 1920 was an arrested liquidation. Out of the tremendous increase in volume of business, in prices of material, and the claim of shortage, not because there was a shortage, but because there was a desire to make a certain amount of goods, and orders were placed far in advance of anything that was expected to be delivered—all of that, when it came to the prices and the deflation had to be made, was supported, as you will remember, not only by the financial interests of the country, but by every commercial interest, whether manufacturing or jobbing, holding up the structure of business that, by reason of the income tax at the time of deflation, was in jeopardy of a crash.

That liquidation was not permitted to go on. The result that is now transpiring is therefore, a perfectly logical result, and it is one of the basic factors underlying the present rather less satisfactory condition of business.

Enterprises that were desperately hurt, that would, under any ordinary condition, other than the continued support, have gone down at the time of the period of deflation, again were held up and allowed to operate under the most generous conditions of credit and extension, to determine whether there was vitality and life in the enterprise that could be saved for future operations.

The years that have since passed have been years of testing. There is not a bank in the United States in any of the larger cities that has not carried upon its books a certain amount of definitely frozen credits, willing to give every possible opportunity for these enterprises to show vitality and a renewed life and by renewed capital or by reorganization, come into the field of prosperous operation.

Well, now, obviously, what must happen under a condition of the attempt to arrest liquidation, must some day be renewed as a liquidation. And that was not true in 1921, nor in '22, nor in '23. We had in 1921 and '22 years in which everybody was willing to give the other fellow who was desperately hurt, or hurt at all, a chance for his life. In 1923 we had that increase in business which gave new hope to many who, in '21 and '22 had felt doubtful about their ability to continue, and gave new hope to those who were

financing the enterprises, that, in another year or two or three years like 1923, they would be able to save many of the industries that were in distress. It is not coming. And the natural course is the secondary liquidation, and we are in that secondary liquidation at this time; and, possibly not important for your business, but for general business that secondary liquidation is a very pertinent factor in determining the condition of business in this year 1924.

Distressed organizations that are compelled by virtue of the experience of the last four years to terminate their operations, find it necessary to liquidate their accounts and their inventories. Necessarily when you have a large number of distressed inventories to throw into the market, you have an uncertainty in values and prices and a difficulty to maintain business upon a prosperous level. But it is the healthiest condition that could exist. That secondary liquidation had to come. There were undoubtedly any number of concerns who would have been better off had they been closed instead of held up at the time that the first liquidation began. But there is no use going back to old history.

Now the liquidation must go on, but when it is accomplished, we will have a clean industrial house and a new foundation without distress stocks, and we will be able to enjoy that structure of prosperity which this country is so sure to have.

The Psychology of the Political Situation

Now on the other side of this logical condition you have also got to look at the psychology of the political situation. For here you have the economic analysis that the secondary liquidation must go on and must influence business. And then you have as the second factor, the political situation of this year, which is a year in which business is always more or less affected and particularly affected this year because of the radical conditions in Washington with respect to legislation.

But no matter how sane and sound your chief executive may be, so long as he is surrounded by a congress that will demand economy on the one side and ruthlessly expend the tax payers' money on the other, he is powerless to deal against a reactionary body of that kind that is more concerned in affecting the conditions of finance than almost any other factor that we are confronted with today. (Applause.)

Now, obviously the presidential year is a year in which we may expect adverse factors to attach to business. If the secondary liquidation could have come in 1923, it would have been a rather simple proposition, but second-

ary liquidation taking place in a presidential election year—these two together operate still further to depress a condition that gives us less hope than we had in 1923 for the outcome of the year's operation.

Here are two factors, both of them kindly, both of them consistent, both of them necessary to the future welfare of business. Passing the presidential election year, passing the secondary liquidation, we then have a new foundation upon which to build our business structure, and, even though we may, in the course of this year's election, choose for the presidency a party, or a man, or a group that we are not altogether satisfied with, and perhaps we may think would be reactionary—we have, of course, in a moderate way the illustration Great Britain has given us, that, no matter who may succeed to power, the responsibility laid upon a man sobers his judgment and sobers his action, and that, radical though he be in his talk and in his canvass and in his claims before election, the man who takes public office understands that upon him rests the responsibility of the national welfare, and he seldom exercises radical tendencies nor permits radical measures after that responsibility is laid upon him.

So we may feel a certain degree of comfort, knowing not, then, what may transpire. I think we all hope for one thing very devoutly—a safe, sound, courageous, thoughtful man, as well as a congress that will guide our destinies for the next four years into the greatest prosperity that we have ever known. (Applause.)

Now, then, let us look over on the other side. . . Having set up the adverse as I have, let us set up the other side.

The Optimistic Side

Here is a country in which we have fifteen million more customers than we had ten years ago, every one of them capable of being customers of yours. Now that is considerable of an increase, to run from 95,000,000 people to 110,000,000 people. Bringing about in the ten years that have elapsed an increase in our republic of 15,000,000, more than ten per cent, nearly fifteen per cent, is a happy situation. So that, as good business is built upon the number of customers, and upon the wealth of those customers, their ability to buy and upon their disposition to buy, we have these factors that we ought to consider over on the side of what will be the basis of our future prosperity.

We have then, 15,000,000 new customers, half of them producers of wealth as well as consumers.

We have a country which, ten years ago, was deeply in debt to foreign nations for the money that had been advanced to us with which to continue

our production and build up our resources; a country today that is known as the greatest credit country of the world. Ten short years have passed in the United States from that basis where we were dependent on the resources of other nations in the carrying on of our work of development, into that place where of necessity we must contribute to the development of other nations, out of the wealth that has so rapidly and unexpectedly accumulated here.

Now, you have the number of customers and the great national wealth, and we have got the individual wealth. Never were the people of the United States so well employed, so thoroughly employed and at such compensation as they are receiving today. Therefore the buying power of these 15,000,000 and the 95,000,000 that went before them, has been in increased buying power, a buying power where the wage that is received has advanced more rapidly than the cost of living. With the cost of living on the decline today, the margin between the wage received or the earning power and the cost that must be put out for the necessities of life, is gradually widening, leaving a larger surplus for the luxuries of life and for the later readjustment which, of course, must necessarily come.

So, you have the national wealth, you have the customers, and the ability of the customers to buy and the willingness of the customers to buy.

Only in those cases where, in the agricultural areas of the country there has been distress because the prices of the commodities were made in a world market for a surplus that had to be sold in the world market, and necessarily affected the prices of the same commodities at home, therefore bringing a lower average price for the commodities of the soil than would have been justified and would have been desirable had it been possible for us at home to make the prices and sustain them, both for our domestic surplus and for the markets of the world. There is a distress and a real distress.

There the buying power is somewhat decreased, and also the willingness to buy is somewhat lessened. But generally the actual percentage of the agricultural group seriously affected by the conditions we are discussing in the most distressed areas of this country, is small in comparison with those who are able to travel on their way and live comfortably and well and buy reasonably, not of the luxuries but of the necessities and for the replacement of the things necessary to their operation.

Two weeks ago in the northwest, in making a careful inquiry among the bankers of the northwest as to the number of farmers in that great northwest

territory so signally distressed because of the one crop condition, they told me that the count was this, that not more than twelve per cent of the farmers of Minnesota, North and South Dakota and Montana were actually distressed and that the remainder of that eighty-eight per cent, perhaps were not all of them comfortable, but they were in condition not to feel the pressure like the twelve per cent and were able to carry on their operations with a degree of satisfaction to themselves and with an increase in their buying power, even though the prices of the single commodity which was so much raised in that country was too low to show anything like a reasonable return per acre in money value for the operation of the year. They were able to do this, because the eighty-eight per cent had learned the science of diversification; they had learned to get 15, 18 and 20 bushels of wheat where they planted wheat, because they sowed clover and plowed under clover to enrich the soil by natural means, so that the yield, although it was only in the intervening year, they were able to put in their wheat and garner it in a greater amount than could possibly have been the case had they planted the staple crop every year until their land was worn out. They were dairying; they were using the by-products of the farm; for the raising of those things in live stock that had not been done before, and in consequence they had a cash return that was saving them from the distress of their neighbors who were solely one crop men for the most part, after learning to go into diversification and after learning to carry on the more simple farming operations.

Thus you have the population, the customers, the national wealth, the earning power, the willingness to buy, and, better than that, you have a marvelous capital. Your banks are filled with money for the uses of business. The savings of the people have been increased by leaps and bounds in these same years.

There is nothing, nothing, nothing the matter with the underlying conditions in the United States of America.

A Consistent Attitude and Program for 1924

And what shall it matter, if, by a combination of circumstances in this year of 1924, that some of us find ourselves without the volume of business that we would like to have, and without the profit that we would like to earn. We can only say that this is the year when we will settle down courageously to do all of the business we can do; we will fight for our business a little harder; we will economize in our operations a little closer; we will house up our industry for the good years that are ahead, and for the years that will

follow, so that, when the time does come and the opening of business conditions will be apparent to us, our organizations will be best able to cope with the volume of business, and we will have sustained that producing power and that selling power which will give us the prosperity for the future.

Now that is all at home. It is not the candy business alone; it is not the banking business alone. Studied intensively or studied generally is not going to promote prosperity altogether. The business men of the United States have never interested themselves as much as they should in the fundamental conditions that underlie good business. We are a young country. We are building industries more rapidly than anywhere else in the world. We are more tied down to the walls of our operations perhaps than anywhere else. We have not taken the time to look out into the whole field and endeavor to measure what is our responsibility to the entire business development of the whole nation and of the world.

We are wrong in that. Your coming to this meeting will give you new ideas and these ideas can be concreted into prosperity for you, if you will apply them. You cannot look out over the general business condition and financial condition of this country and of the world and study the relationship of your industry and of your country to those external conditions without finding in every analysis that you make some point that turns in application to your own business; even though it seems not directly to relate to your own affairs, it will be of inestimable value to you when applied to your own particular business.

This country in the years that are ahead of us will become prosperous as we are able better to stabilize conditions, as we are able better to stabilize prices, as we are able to make the variations in prices less radical than the speculative conditions of the present time.

If you gamble in sugar, if you did gamble in sugar, you got hurt. (Laughter.) If you probably were inclined to accept the wide publicity of a few weeks ago and were told what prices were going to be when the canning season came, and you filled your warehouses, you got hurt again, just a little, not so much, but you took the wrong cue.

Now, of course, gambling in itself is the wrong thing under any circumstances. That is not going to bring prosperity, and of course much less now when the variation of prices is so tremendous and so much unlike the pre-war prices. That is the same in

all commodities; it is not sugar alone, it is everything else.

An Underlying Confidence Needed

The stability will come when that stability has reached the point where confidence is felt over the world and conditions are not so radical as they are today.

And how is that condition to be found? It is only to be found by the settlement of conditions the world around. The settlement of conditions that brings confidence from one season to another; and until there is in the country an underlying confidence from one season to another, there will be no large profit nor any stable business.

We cannot do business as we are doing it today, buying from hand to hand and from hand to mouth. We cannot make money under conditions that exist today, even though our turnover may be equal to that of 1923 or 1920 or 1919. The market must be developed upon constant seasonal lines of intake and output. Raw materials cannot be produced by hand to mouth methods; manufacturing cannot be done satisfactorily by hand to mouth methods; satisfactory distribution cannot go on profitably by hand to mouth methods; and hand to mouth methods will continue until such time as in domestic affairs and in world affairs we have reached a state of stability of people, of temperament, of currency, of business value; and when that time comes, how sure we are to swing into a highly prosperous period.

Is there a likelihood that we shall have peace in Europe and stability in Europe as a fundamental to these years that are coming ahead of us when we hope for so great prosperity? There never was a time when capital operated for that stability more than today.

A New Principle Applied to International Debt

Out of this business commission that went to Europe to analyze Germany's ability to pay, and wisely discussed with the governments of Europe the necessity to accept the utmost that could be paid in any year as the basis of settlement, we have found a new principle applied to international debt and the reparations, which, in my judgment, is absolutely certain to bring about an agreement between Germany and the allies. It is a principle that has been applied for the first time to international affairs, although it has for all time been applied to your own affairs.

What an asinine proposition it would be for any one of you having a debtor who was in distress and could not pay his bill, and his account was so large that you were very much concerned about it, and, after a careful analysis of the debtor's condition you became

satisfied by the audit of his books and by the conditions that were apparent to your investigators, that the utmost that debtor could pay would be so much per annum, keeping him in operation, keeping him employed, keeping his organization together, keeping his trade moving, how foolish it would be for you to say, "until I can fix the total amount that you are going to pay me and I know whether it is going to be \$100,000 or not, I won't make any deal with you whatever." How utterly foolish that would be as a business proposition, and yet that is exactly what has been going on in Europe. They have tried to say that Germany owes the allies 132 billions of marks. We find that you can pay 80 billions of marks, but the rest of it you can't pay; but if you get so you can pay it, well and good; but we will let you make a start. For five years they have been endeavoring to find a way for Germany to get the money to make the payments. It has been discouraging to Europe because no one had the credit or the capital to extend the volume of that great indemnity. All through these five years they have been endeavoring to find a way for Germany to get the money to make the payments.

The fixing of the total amount is one of the silliest things in the world. When you have determined that any nation, whether it is France owing the United States, or whether it is Italy owing the United States, or France owing Great Britain, or Germany owing them altogether, when you know the utmost that this nation can pay and live is so much, and that amount it is agreed shall be paid and shall be guaranteed by those guarantees necessary to know that it will be forthcoming—when you have done that, don't you see how utterly unimportant it is, what the total amount is going to be? You have kept alive a nation or a business; you have kept alive a customer, whether it is a nation or a business.

You have made happy again the people who were distressed; you have given them an opportunity to live. They were willing to pay the utmost they could raise and pay from year to year. What matters it whether you know how much you are ultimately going to get? Let it go through the years; what difference does it make? This is a righteous principle; it is a sound principle, and it had been applied in the business world for years as the only method of settling debts; so, in this international crisis it is now going to be the only method of settling the reparations and put Europe back again upon a peaceful basis, both with respect to the governments themselves and of the economical life of the continent.

There is the foundation stone again

—settled condition in Europe; and they are in prospect more than ever before, and almost assuredly to be settled in that way.

Unquestionably there will be wonderful conditions in our own country when we feel the confidence that is to come, and have the relief from the harrassing conditions that have existed these last five years. People, earning power, wealth, willingness to buy, all of the conditions favorable for the future.

Closer Relationship of Business and Government

Political conditions I would rather not discuss. If I did I would go away from here feeling mad and I am sure you would. (Laughter.) It is something that we have got to live under. It is our form of government and we are responsible for it. The form of government is all right, but the way we select our representatives is all wrong. We made progress as we thought, in the direct primary. As a result we get the poorest timber into political life that we have ever had in the history of our country. (Laughter and applause.)

But it cannot be corrected tomorrow. It will be corrected if wisely we work together, soberly to study the cause and effect and undertake by reason or counsel together to find the better way to do the thing in a better manner. In the meantime there must be a closer relationship of the business interests of this country, and a closer attention to the legislative and executive problems of the nation and of the state and of the cities in which we live; a closer study given to the men, who, for the time being, represent us.

We are somewhat at fault and we must admit it. Have you within the last four months sat down with the congressman from your congressional district or one of the senators from your state and talked with him of the economic conditions as you see them? No. You have not. Has a labor agitator done it? You bet he has. And further, the agitator of radical things who is trying to introduce his theories into the United States of America, hasn't anything else to do but try to get the hand and ear of the man who has the power to give a vote.

It is not altogether the fault of the man in public office if you do not do your part, at least to tell him in a kindly way as a constituent, what you see and think of the conditions, rather than let him get this great mass of misinformation which is being poured into the public ear by the press and periodicals, and into the public servant's ear by every agitator who has a voice.

There must necessarily come, if we are to enjoy the fruits of the days that

are ahead, a more cordial relationship between the organized business interests of the nation and its own representatives. Not the lobby in Washington. The Chamber of Commerce of the United States destroyed that lobby in 1922, and it did it with malice aforethought, if malice it may be called. And it put it back upon the constituency that when a problem on economics or a problem of national concern was to be considered, a report upon that problem was made by expert men, the best that could be found in the business world. A referendum pamphlet was prepared, with all the arguments for and against the proposals that were made, and sent to the associations which were in the councils of that association, that there should be the opportunity to study the problem and give voice to the decision. And when congress gets the referendum, it has something concrete to hold to. But when congress gets the referendum back from the constituency, if there is no effort made to tell the congressman why you vote that way and why you think this and that, and what you would like to see done, can you wonder if he does not always follow the wishes that are expressed by organized business, when he is met man to man and face to face with special arguments from the other side by men who argue him out of the economic soundness of our referendum and out of his decision into doing something that was wholly outrageous? Until we business men of the country assume that responsibility and exercise that responsibility, we need not quarrel too much with public authority if they don't always do our bidding.

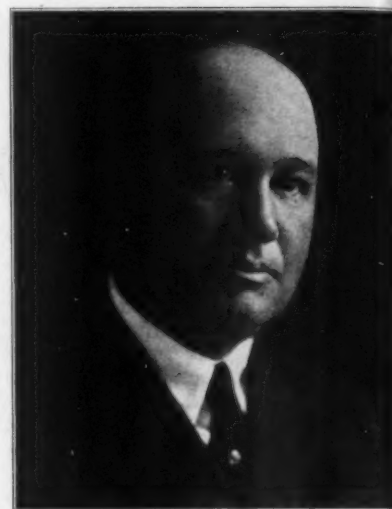
Now, we have before us a year that is not going to be as satisfactory as it might be. We ought to be happy in the fact that the trouble is going to come at one time. If we had trouble this year with the readjustment and liquidation, and next year with the political situation, and the year following with something else, and had to look forward to three years of interrupted operation and for some reason

of discomfort, we would be very unhappy. But we are getting it all in one lump. It is a bad condition for many of us; but it is a condition that we have got to meet. So, we might as well meet it with a smile and do the best we can.

Let's Settle Down to It

Now, the proposition is this, having to do it this year, let us settle down to it. Let us be as optimistic as we possibly can be. It won't do any good to be anything else. Let us put optimism into our selling forces; let us put optimism into our organization. Let us look, not at today's orders, or the orders of tomorrow, but to the fact that we are housed up for whatever may come this year, satisfied if we break even, or make some profit; fighting for what is ours to have, because we know our own capacity of production and we know the intake of our trade; fighting our own battles in competition, knowing that to the best man will go the orders. Settle down, bearing in mind always that the great problems that will concern our future are the other problems that we must safeguard, the creating of character, of property, the right of individuals guaranteed under our Constitution and so sadly disturbed in many respects by the operations of the last few years; the exercise of economy in government and in private business and in private life; increasing our efficiency to be able to meet the problem of competition which will come from Europe when European affairs are settled and her productions are going over the world again, as in the pre-war days.

If the conditions which we have been discussing are settled according to right principles, then what have we to fear? We shall have a right to be optimistic about future conditions. And if we accept the conditions which do exist, we can be bullish, knowing that we will win. But when we are bullish, let us watch the next step. The man who builds his business upon the fact that the United States is destined to great-



GEORGE T. PECKHAM

A. J. Walter Factory

Member Executive Committee N. C. A.

ness, but does not see the next step that he is to take in his private affairs, will go broke. For I believe that foolish optimism has broken more men than pessimism ever broke.

But, believing in the ultimate growth of our nation, watching carefully step by step our tramp along the road in the present day, fitting ourselves into conditions that do exist, accepting the responsibilities and obligations of citizenship that are ours by birthright or adoption, and honestly serving in this day of readjustment of world conditions, not serving our own business alone, but serving as good patriots a great nation interested in the welfare of the world, then will we come into our prosperity, and we will enjoy it over a longer period of years. And the gain will not alone be the gain that is material, but it will be the satisfaction that will come from the part we took in the re-making of the world along the lines of peace and sound economic operations. I thank you. (Great applause.)



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Over \$200⁰⁰ per Month Saved by Using a Perkins Adjustable Dry Room

Pine Brothers of Philadelphia have kindly
released their power bills to prove it.

ELECTRIC POWER BILL BILL PRESENTED MAY 15 1924

DATE 1923		METER READING		TOTAL CONSUMPTION IN KILOWATT HOURS	R. W. H. AT THE RATE			AMOUNT OF BILL
FROM	TO	PRESENT	PREVIOUS		7 1/2 CENTS	6 1/4 CENTS	3 1/2 CENTS	
APR. 13	APR. 11	1255	Average	120	MINIMUM			16.07

THE PHILADELPHIA ELECTRIC COMPANY
TENTH AND CHESTNUT STREETS

PROMPT PAYMENT
PAYMENT DUE DATE AFTER

UNPAID BALANCES, IF ANY, ARE NOT INCLUDED IN THIS BILL. SEPARATE STATEMENTS ARE RENDERED FOR OVERDUE ACCOUNTS.

PAID 5-14-23
PINE BROS. INC.
140 NO. 8TH ST.
PHILADELPHIA, PA.
BDC-9-165-7

ELECTRIC POWER BILL BILL PRESENTED MAY 23 1924

DATE 1924		METER READING		TOTAL CONSUMPTION IN KILOWATT HOURS	R. W. H. AT THE RATE			AMOUNT OF BILL
FROM	TO	PRESENT	PREVIOUS		7 1/2 CENTS	6 1/4 CENTS	3 1/2 CENTS	
APR 12	MAY 11	5690	0851	4859	770 308	770 308	2705	234.75

THE PHILADELPHIA ELECTRIC COMPANY
TENTH AND CHESTNUT STREETS

PROMPT PAYMENT
ON ALL BILLS NOT PAID WITHIN TEN (10) DAYS AFTER PRESENTATION AN ADDITIONAL CHARGE OF 5% WILL BE MADE.

UNPAID BALANCES, IF ANY, ARE NOT INCLUDED IN THIS BILL. SEPARATE STATEMENTS ARE RENDERED FOR OVERDUE ACCOUNTS.

PAID
PINE BROS. INC.
140 NO. 8TH ST.
PHILADELPHIA, PA.
BDC-9-165-7

CUSTOMER'S RECORD: DATE PAID CHECK NO.

The Old Dryer with Fans MAY 1923-234.75

The Perkins Dry Room without Fans MAY 1924 ~ 16.07

Net Saving per Month with Perkins Dryer \$218.68

THE electric power bills reproduced above show the exact cost for electric power to operate the Perkins Adjustable Dry Room last month in the plant of Pine Brothers of Philadelphia, as compared to the cost of operating their old dryer (with the fan system) for the same corresponding period a year ago, a saving in power alone of over \$200 per month. Pine Brothers, who have kindly loaned us these original receipts, have stated that their savings effected by the installation of the Perkins Dry Room are \$300 per month, which includes power, labor, up-keep of belts, motors, etc. You all know Pine Bros. Celebrated Glycer-

ine Tablets. There is no confection more difficult to dry.

It was not hard to sell J. Frank Shellenberger of the same city with such tangible evidence of startling economies amounting each year to more than the entire installation cost of the Perkins Dry Room. Furthermore, the goods are perfectly and uniformly dried, top and bottom alike, with a saving of time in the starch.

Shall we send you further information or send our engineers to make a survey of your drying problems and quote prices?

ELMER E. PERKINS CO.

Wrigley Building

CHICAGO



Among those Present at the Forty-First Annual Convention of the
Drake Hotel, Chicago, May





on of the National Confectioners Association of the United States
Chicago, May 20 - 23, 1924



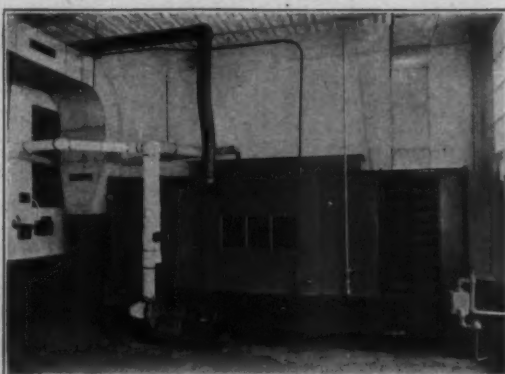
Every Candy Maker Knows that Winter Produces Conditions that are Ideal for Candy Making

The good old Summer time is not necessarily a bad time for the manufacture of candy.

The conditions which you find most ideal can be produced mechanically every day in the year by BENTZ Equipment

THE BENTZ "CHILLBLAST"

The leading air conditioning, cooling and dehumidifying apparatus for the confectionery and bakery trade. Provides correct uniform temperature and relative humidity in chocolate cooling and storage rooms, and also hard candy packing and storage rooms. Adaptable to any department where ideal manufacturing conditions are required.



THE BENTZ DRY ROOMS

For Marshmallow Gum and Licorice. Of fireproof construction, built in panel sections, easily removed or extended. Thermostatically controlled, temperatures adjustable, uniform drying conditions at top and bottom of racks. Economical in operation through recirculation of heated air with greatest possible moisture "pick-up."



THE BENTZ "COLD BED"

THE Standard Cooling Table for Chocolate Coated Candy and Biscuits, adaptable to large or small factories, and all makes and sizes of coating machines. Provides continuous uninterrupted flow of chocolates from coating machine to packers. Can be used in connection with existing air and water supply or can be provided with self contained apparatus for delivering refrigerated water and cooled conditioned air at small additional cost. Saves labor, time and space. Improves product. Simple in operation.

Our Engineering Dept. is at your disposal. "We Serve to Serve Again"

BENTZ ENGINEERING CORPORATION

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Use of Chocolate in Candy Plant

(Continued from page 30.)

I have never had any trouble with machine dipping—that is, I don't mean by that that you can't have it, but we are a little more fortunate than the man who asks the question. If I knew, I would gladly tell you. Here is another question.

"Will goods dipped in chocolate at 92 degrees turn gray on the dealers' shelves quicker than those dipped at 88 degrees?"

If the goods are dipped at 92 and are perfectly dry and they maintain the color of the coating, or the coating that you are dipping it in, they should keep just as well as the 88 degree; unless you chill one or the other in the drying of the same. I don't see any reason why it should. The only difference, in my mind, is that dipping at 88 degrees you have a little greater amount of chocolate on your centre than at 92—all conditions being the same, dipping in the same coating; that stands to reason. One danger of dipping at the higher temperature is of getting a little less coating on your merchandise.

A Voice: At what temperature do you dry your goods, Mr. Bunte?

Mr. Bunte: Well, that varies. We get very satisfactory results around 48 to 50. You can dry at a higher temperature than that provided your humidity is not too great.

A Voice: That is for machine goods?

Mr. Bunte: And hand goods, as well. If you take the moisture out of the air, you get much better results than you would with a lower temperature. We find we get very good results between 48 and 50.

Here is another question: *"What causes snap in chocolate?"*

I can tell you better what will take it away—substitute butter and you won't have any snap. It has always been my aim to get a covering or a chocolate that had a snap, as I always felt if I had a coating that had a snap, I had something pretty good, at least pure. But you cannot take a substitute of cocoa butter and put it in your coating and expect to chill that—you might snap it with force, but if you will hold that coating in your hand a minute or so, you will find instead of getting a slow melting chocolate, you will have a greasy melting chocolate. Now your substitute might be at a higher melting point than cocoa butter, but that don't mean that you are going to have a dryer piece of goods. My experience is, it shows a certain greasy element in the chocolate; I can't get it out unless I keep it out.

"Not Touched by Human Hands"

There was a time when we started dipping in chocolate by machine; the minute you started this machine you felt it would be a bad job, because the goods were machine dipped. I think some of the firms in the east should be highly complimented for dipping only machine goods—no hand touches their chocolate. If you take the same coating and put the same effort on your machine dipped goods that you do on your hand goods, why shouldn't it be better than your hand dipped goods? I think a house in the East has demonstrated that; turning out a line, as I understand it, where a human hand has not touched the goods. Its quality is the finest you can get; they use the finest material. They use, as I understand it, the best of everything that money can buy; the only difference is, instead of dipping by hand they dip by machine. I don't believe anybody will dispute that the improvements have been ad-

vanced sufficiently so that you can turn out as nice a piece of goods on a coating machine, however, I don't advocate that; but I do advocate keeping the substitute out of your coating, and if you do that, I don't care how you dip, you will have good goods.

Know the Cocoa Butter Content

I might mention this before I close. A salesman came along about three weeks ago and I was advised of a couple of cars of chocolate liquor being sold to a certain firm at a low price. I could not understand how they could sell chocolate, regardless of how cheap the bean is, at that price. Now, we are not selling chocolate liquor, so this was purely from the standpoint of curiosity on my part. I asked this man if he could get me a piece of the liquor, and he said he would be glad to. About a week or so later I received this liquor and had an analysis made in our laboratory, and it was just what I suspicioned—there were no foreign fats in it—that would be an injustice to the manufacturer, but it did contain between 35 and 36 per cent of cocoa butter fat. I then had an analysis made of what I considered the cheapest bean in our place and that contained between 54 and 55 per cent of cocoa butter content. I did not take a bean that had an exceptionally large butter fat content, but a cheap bean, to find out why it was possible for a man to sell at such a price. The easiest thing in the world. If you will let me run this into the drying room and extract that percentage of cocoa butter out of this liquor, I will sell it at the same price. In all fairness, I think you should take into consideration not only the quality of the beans, but you should also take into consideration the amount of cocoa butter that this liquor contains. It is to your benefit to do so.

In closing, I wish to say that I shall be glad to answer any questions that you want to write to me about. I thank you. (Applause.)

Herman Goelitz who has been operating a plant in Portland, Oregon, is erecting a modern factory building in Oakland, California, and is moving his plant to the new location. The building will contain 9000 square feet of floor space it is reported.

The Herz-Oakes Candy Company's factory in St. Louis was damaged by fire recently. The estimated loss is \$15,000.

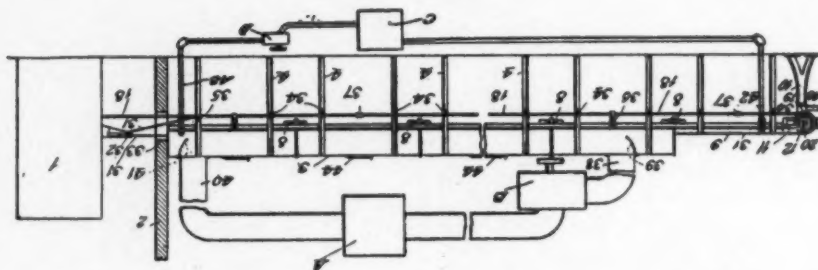
Announcement has been made that the A. B. Walker Candy Co., of Muskegon, are erecting a large candy factory at Owosso, Michigan. The company will move their manufacturing branch of the business to Owosso and maintain the general offices at Muskegon. This is one of the largest candy factories in Michigan and it is stated that more central location of Owosso will enable them to distribute their products to better advantage.

WANTED: A Copy of the N. C. A. Buyers' Guide

One of our subscribers is anxious to get in touch with someone who has a copy of the 1916-1917 Buyers' Guide issued by the National Confectioners Association of the United State. The subscriber will be glad to pay any reasonable price for the copy. Perhaps you have one in your files that you do not need. If you have please write the Editor, The Manufacturing Confectioner, 30 North La Salle St., Chicago.



New Patents

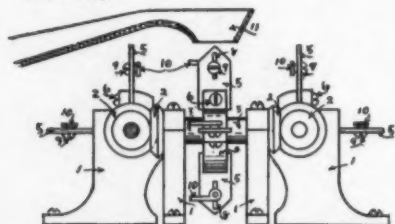


1,496,651. Cooling Device. Harry Bentz, Montclair, N. J. Filed Aug. 15, 1922. Serial No. 581,937. 7 Claims. (Cl. 257—23.)

2. Cooling apparatus comprising an elongated enclosure having therein a tunnel, a conveyor passing through the tunnel and initially carrying the articles to be cooled, means for admitting a cool-

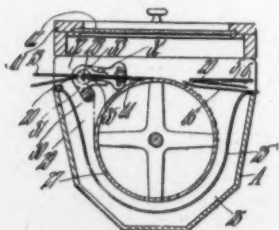
ing gas to the tunnel at one point and removing it at another so as to cause a circulation of the gas through the tunnel counter to the direction of travel of the conveyor in the tunnel, and means for simultaneously refrigerating the floor of the tunnel over which the conveyor travels in close proximity thereto, so that the articles will be approximately uniformly cooled on their entire surface.

1,494,263. Candy-Cutting Machine. Lester McCoy, Denver, Colo. Filed Jan. 2, 1923. Serial No. 610,314. 1 Claim. (Cl. 107—21.)



A candy cutting machine comprising two or more, coating, radially-placed series of revolving knives; adjustable arms revolving with said knives for holding the candy in position and means for bringing the knives in each series into a stream of candy simultaneously with the knives of each other series.

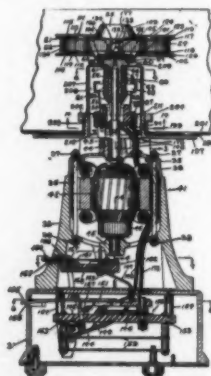
1,493,423. Confectionery-Coating Machine. Alonzo Linton Bausman, Springfield, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Feb. 7, 1922. Serial No. 534,791. 10 Claims. (Cl. 91—2.)



5. In combination, conveying means of relatively impervious material for

articles to be coated, a second conveying means of similar material to receive the coated articles having its receiving end spaced from the discharge end of the first named means and means for producing a moving and substantially unbroken layer of fluid coating material to fill the gap between said means and effect the bottom coating of the articles and transfer them from one means to the other.

1,489,342. Candy Machine. George E. Brent, Nashville, Tenn. Filed May 29, 1922. Serial No. 564,531. 4 Claims. (Cl. 107—8.)

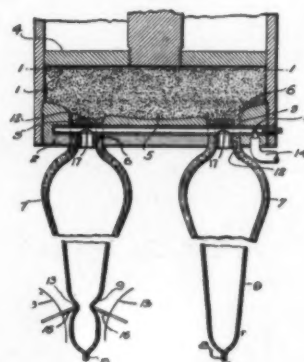


1. In a candy machine of the character described, the combination of a rotatable head, an electric motor for rotating said head, a rotatable electric heating element at said head rotating with said head, electric connections from a source of electricity for said electric motor including a rheostat, electric connections from a source of electricity for said heating element including brushes and rotatable elec-

tric contracts therefor adjacent to said head said last-named electric connections including a rheostat, and means for independently operating said rheostats for adjustably controlling the speeds of rotation and the heat of said heating element with relation to each other and independent of each other, so as to provide various speeds of rotation for said head and said rotatable electric heating element and various degrees of heat for said rotatable electric heating element at each of the speeds of the latter.

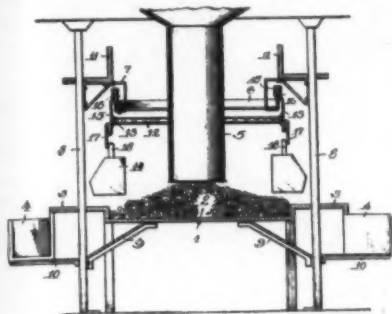
4. In a candy machine of the character described, the combination of a frame, an upright electric motor mounted therein, an upright shaft rotated by said motor and extending upwardly therefrom, an insulating spool about said shaft supported by said frame in spaced relation from said frame, a rotatable head comprising a rotatable vessel and an annular electric heating element therefor arranged to discharge candy floss by centrifugal force, said head comprising an insulating sleeve about said shaft under said vessel, a pair of electric contact-rings on said sleeve, brush-stands of different heights including brushes for said respective contact-rings, means for securing the lower ends of said brush-stands to said insulating spool, a bowl positioned on said frame about said contact-rings and said brush-stands to receive said candy floss, and a shell within said bowl protectingly received about said contact-rings and said brush-stands.

1,492,600. Method of Making Candy. Philip B. Laskey, Marblehead, Mass. Filed Aug. 20, 1921. Serial No. 493,889. 2 Claims. (Cl. 107—54.)



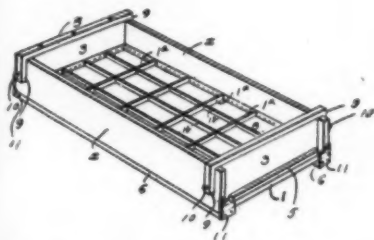
1. The steps in the method of making candy which consists in extruding candy material through an annular opening which is of sufficient width so that said candy material will be extruded freely, subjecting the tube thus formed to sufficient internal pressure as it leaves said opening to increase the diameter of the tube and thereby reduce the thickness of the walls thereof, and then pulling the enlarged tube longitudinally thereby to reduce its diameter and still further reduce the thickness of the walls.

1,491,183. Apparatus for Packaging Confections. Sidney C. Anschell, Chicago, Ill. Filed Sept. 10, 1923. Serial No. 661,957. 8 Claims. (Cl. 226-2.)



1. In an apparatus for packaging confections, including the enclosure of an article in each package, the combination of a confection support and means for continuously conveying a supply of articles past said support and above the same.

1,494,237. Collapsible and Adjustable Candy Mold or Board. Constantine M. Haddad, Tyler, Tex. Filed May 26, 1923. Serial No. 641,694. 6 Claims. (Cl. 107-19.)

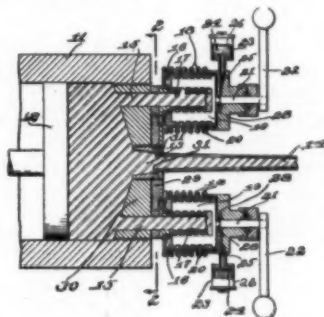


1. In a device of the character specified comprising a bottom, sides, cross-pieces resting upon the bottom and engaging the inner faces of the sides and a bar attached to each of the cross-pieces and having opposite ends bent to engage the outer faces of the sides and retain the parts in place.

5. A device of the character specified, comprising a bottom, transverse cleats

secured to the bottom, sides, strips secured to the sides and underlapping the bottom and engaging said cleats to hold the bottom and sides against relative endwise movements, and crosspieces.

1,493,082. Machine for Forming and Striping Stick Candy. William B. Laskey, Marblehead, Mass. Filed Oct. 19, 1920. Serial No. 417,988. 6 Claims (Cl. 107-1.)

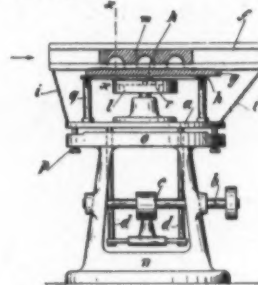


1. In combination with a piston and cylinder to force the candy through an orifice in a die to form a stick, a mixing chamber connected with said cylinder by a passage, means for supplying coloring matter to candy in said chamber, a plough and a passage connecting said mixing chamber and intercepting the main orifice at a point immediately behind the plough.

6. In a machine of the character described, a mixing chamber which is annular in form and has an inwardly extending tubular passage open on its inner end, and a rotating stirrer operating in the annulus surrounding said central passage, an axle for said stirrer located opposite said central passage, there being an entrance passage for coloring material at the axle end, and an outlet passage at the opposite end of the device.

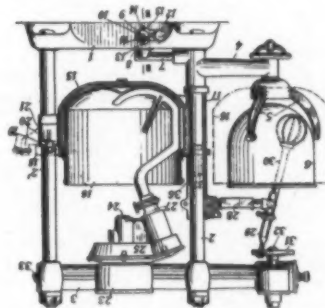
1,492,738. Apparatus for Making Bodies in the Form of Shells From Plastic Chocolate or the Like. Alfred Muller, Sudende, Berlin, Germany. Filed Mar. 17, 1921. Serial No. 453,145. 8 Claims. (Cl. 107-81.) (Granted under the provi-

sions of the act of Mar. 3, 1921, 41 Stat. L., 1313.)



5. In an apparatus for making shell-shaped bodies from plastic material, the combination of a mold and mold-support, and power mechanism for bodily revolving said support and simultaneously bodily reciprocating it up and down so that it will give the mold a beating movement.

1,490,550. Machine for Making Confectionery. Friedrich Aeschbach, Aarau, Switzerland. Filed Jan. 12, 1924. Serial No. 685,778. 4 Claims. (Cl. 259-64.)



1. In a confectionery machine, the combination of a column, two pans mounted to swing about the same with their vertical axes equidistant from the center of the column, a rotating kneading arm mounted at one side of the column and arranged to operate in one of the pans, and a beater mounted at the opposite side of the column for operating in either of said pans at will.

An annual output valued at \$51,000,000 and a payroll with the names of 14,000 employees stands to the credit of the confectionery business of the Dominion, it was stated in the presidential address before the sixth annual convention of the Confectionery, Biscuit and Chocolate Industries of Canada.

The Madison Candy Co. of Madison, Wis., has been purchased by Joseph E. Kleiner, Frank Mosel and William Mosel and will be known as the Madison Manufacturing Co. It is incorporated at \$25,000.

Confectionery exports from the United States in 1923 totalled 9,773,778 pounds, valued at \$2,013,944. About two-fifths of the total quantity exported went to the United Kingdom. Canada was an important buyer, and a large proportion of the total was distributed among the various Latin American countries, with Cuba in the lead.

Samuel Bushong of West Wichita is building the first factory in Wichita, Kansas, devoted exclusively to the manufacture of candy. The size is 50x125 feet, two

stores, brick construction, at an estimated cost of \$25,000.

We have received recently an attractive little organ issued by the women employed in the wholesale and retail confectionery, chocolate and cocoa industry in Australia. The name of the little organ is "The Woman's Clarion." It is rather unusual in our industry to find the women employees organized and carrying on such extensive activities. Discussion of the 44-Hour Week Wage Board; Women in Democracy; an article on the A. W. Allen, Ltd., Factory of South Melbourne, were some of the articles in one issue.

The Lyon California Glace Fruit Company, San Francisco, California, are building a new factory, the largest of its kind in the world. It is to be a three story building, containing 127,000 square feet of floor space. The company was established in 1852 as the E. J. Lyon Company but the past sixteen years it has been operated under the present name. The factory will be modern in every way. J. C. Raas is president of the firm and Andre Raas is vice-president.

Improved Methods for the Manufacture of Fondant Goods

by H. S. Paine

Carbohydrate Laboratory, U. S. Bureau of Chemistry

An address delivered by Mr. Balch at the annual convention of the Associated Retail Confectioners of the U. S., (an association of manufacturing retailers) Cleveland, Ohio, May 19, 1924

IT is with considerable pleasure that I have accepted the invitation of your Secretary to address you today on some subject connected with candy, and I have chosen for my subject the relation between chemistry and the manufacture of confectionery. It may be disappointing to many of you that Mr. Paine was unable to be here but I shall do my best to fill his place. This industry has been developed in a very effective manner, with practically no direct assistance from the science of chemistry, and no doubt many of you will wonder just what practical relation there is between candy manufacture and chemistry. I hope to be able to show you, in a brief discussion the extremely practical nature of this relationship and to describe to you briefly a recent improvement in candy manufacturing which I believe to be of very great practical importance to your industry. Instead of dealing in generalities, I shall try to confine my remarks to concrete and specific facts.

The science of chemistry furnishes the explanation and interpretation of many of the various precautions and difficulties with which you have to deal. Every industry has its manufacturing problems, and I believe no one will deny that the solution of difficulties is vastly facilitated when one understands thoroughly the reasons therefore and the exact manner in which these problems arise. The candy maker is dealing every day with the application of chemical principles although he may not be conscious of this fact.

I will confine my discussion to fondant types of candy and, before proceeding with an account of the practical development to which I have referred, I will discuss briefly the chemical and physical explanation of some of the things with which you have to deal intimately in connection with the manufacture of fondant types of confectionery.

What Is Fondant?

Fondant, as you may know, is composed of a mass of very small sugar crystals surrounded and enveloped by exceedingly thin films of sirup. These crystals may readily be seen under the microscope. In order that the fondant may be of smooth consistency, it is necessary that these crystals be so small as not to be detected by the tongue. If they are so large as to be individually perceptible by the tongue, the fondant is gritty or granular. In order that the fondant may be of suitably soft consistency, it is necessary that the sirup constituting the sirup films be present in sufficient proportion. If no sirup film were present at all, the fondant would consist of a mass of small sugar crystals and would be quite dry—in fact as dry as ordinary powdered sugar. Other conditions being equal, we may say that the larger the total amount of sirup film in relation to the total amount of sugar crystals in the fondant the softer is the consistency of the fondant. Most manufacturers

doubtless desire to produce fondant centers of rather soft consistency, and some wish the consistency so soft as to produce a flowing center. The question now arises as to how this may best be accomplished. Recall to mind that fondant consists essentially of two portions, one being composed of small sugar crystals, a solid, and the other of sirup films which is a liquid. Consequently, if we transform a part of the solid portion into a liquid, this will increase the proportion of liquid to solid, and, therefore, render the fondant of softer and more fluid consistency. I will now describe to you an entirely new means of accomplishing this object which has been derived as a result of chemical study.

Controlling the Consistency of Fondant

This process has come into commercial use extensively during the last few months, and some of you have already heard of it. The result is accomplished by means of an enzyme known as invertase. An enzyme, I may explain, is a chemical term used to designate a substance capable of causing a chemical change without itself undergoing any change whatever. It is furthermore a characteristic of enzymes that the amount of enzyme required to cause a given chemical change is in itself exceedingly small. Perhaps I may give you a better idea of enzymes by referring to certain ones with which you are no doubt familiar. Pepsin, for instance, is an enzyme, and only an extremely small amount is needed for the digestion of meat or, chemically speaking, the transformation of proteins. Diastase, which occurs in barley malt, is an enzyme, and its specific function is to transform starch into the sugar maltose. The specific function of the enzyme invertase is to transform ordinary sugar into invert sugar.

Now, in explaining the action of invertase when added to fondant types of candy, I would state further that the sirup films surrounding the multitude of sugar crystals contain sugar in solution. When glucose or corn sirup is used in the batch, it is also present in solution in the sirup films. If corn sirup is used, the particular proportion of sugar and corn sirup present in the sirup films depends upon the proportion used in preparing the batch. Furthermore, the sirup constituting these sirup films is saturated with sugar. By this I mean that it contains all the sugar in solution which it is capable of dissolving at the temperature to which the candy is exposed.

In using the invertase process the invertase is ordinarily added to the fondant at the time of molding or remelting, only a very small proportion of invertase being required. When the invertase is mixed with the fondant, it immediately becomes dissolved in the sirup film. Its effect is to transform some of the sugar present in the sirup film into invert sugar. This process is called inversion.

Sugar has now been replaced in the sirup films by a mixture of sugar and invert sugar. However, this fact in itself would not be of any practical importance were it not for the additional fact that a sirup containing both sugar and invert sugar is capable of holding in solution a greater total amount of material than a sirup containing only sugar. The following figures will illustrate the point.

If ordinary sugar is dissolved in water, the greatest amount which will stay in solution at ordinary temperature amounts to about 67 per cent of the total weight of the sirup. On the other hand, if a mixture of ordinary sugar and dry invert sugar should be dissolved in water in a suitable proportion to each other, the greatest total would be approximately 81 per cent of the total weight of the sirup. You will note that there is a difference of about 14 per cent in the weights of total sugar which will stay in solution in the two cases. This is the most important of the circumstances, although not the only one, which renders the use of the enzyme invertase of such practical value.

Now, as the invertase present in the sirup films gradually causes inversion of the sugar dissolved therein and transforms it into invert sugar, the solubility increases and the sirup film becomes capable of dissolving additional amounts of sugar. The solution of such additional amounts of sugar in the sirup films can readily occur since, as already explained, the sirup films envelop and are in close contact with the multitude of microscopic sugar crystals present in the fondant. A certain proportion of these sugar crystals now becomes dissolved in the sirup film, and the process which we have had in mind becomes an accomplished fact: that is, with the dissolving of some of the small sugar crystals the ratio of sirup films to sugar crystals is increased and the fondant becomes of more fluid consistency.

It is possible in this manner to produce as soft a consistency of the fondant as may be desired. This process has the further advantage that the change in consistency occurs after the fondant has been coated with chocolate. The pieces of molded fondant may, therefore, be made as firm as desired for handling prior to dipping, for even rather stiff, firm pieces of fondant will become quite soft when treated with invertase in the manner described. This fact means that scrap during the handling of the fondant pieces prior to dipping may be entirely eliminated. The rate at which this softening of the fondant occurs depends upon the proportion of invertase used. For instance, if it is desired to produce a flowing center within a period of five or six days, a greater proportion of invertase would be used than in cases where a flowing center is desired after a period of say three or four weeks.

Making Four Preliminary Tests

In order that the results obtained may always be comparable, a standardized invertase preparation of definite activity is used. The proportion of invertase employed may also vary with the particular type of candy and the particular consistency desired in the fondant. In this way it is possible after a few preliminary tests to produce exactly the consistency desired in the case of any type of candy in which fondant is used. By way of illustrating the high degree of effectiveness of invertase, I would mention the fact that in the case of fondant made from low boiled sirups, invertase may even be used in such a manner as to produce complete liquefaction. In other words, all of the microscopic sugar crystals become dissolved in the sirup films and the fondant is completely transformed into a sirup. This represents the extreme limit



J. Hamilton, Uncle Sam's Official Candy Maker in action doing research work at the Bureau of Chemistry with Dr. H. S. Paine, Carbohydrate Laboratory, Washington, D. C.

of the action of invertase, the production of a flowing center being only a partial transformation.

For Cordial Centers

While the complete transformation of a fondant into a sirup is, of course, not desirable in the case of fondant center goods, this extreme effect of invertase may be utilized in a very practical way in the production of so-called cordial centers. Now, in the case of cordial fruit centers, the total amount of water present consists both of the water in the sirup films of the fondant and the water present in the juice of the fruit. A greater amount of water is, therefore, available for dissolving the microscopic sugar crystals of the fondant than is the case in straight fondant centers. Nevertheless the total amount of water present in cordial fruit centers, is in ordinary practice very rarely sufficient for completely liquefying the centers.

Here again, we may take practical advantage of the fact that when invert sugar is present a sirup will hold in solution a greater total amount of sugars than when invert sugar is absent. Since the amount of water which we have available in the fondant and the fruit together is limited, our problem is to dissolve as great a quantity of sugar crystals present, then the fondant surrounding the fruit does not become completely liquefied. As you all know, pineapple, being an extremely juicy fruit, ordinarily gives the best result in a cordial center, cherries coming perhaps next. Nevertheless, it rarely happens that all of the pieces in a given batch of cordialized cherry centers are completely liquefied.

Now, by using invertase, and taking advantage of the 14 per cent difference in solubility that I have already mentioned, we find it readily possible to secure complete liquefaction in all cordialized fruit centers, and these centers may include all kinds of fruits, even raisins, which, as you know, are ordinarily difficult to liquefy. Furthermore, it now becomes possible to increase the proportion of fondant to fruit, particularly in the case of the more juicy fruits such as the pineapple and cherry. In other words, since the invertase increases the capacity of the fruit to liquefy the fondant, it is possible to increase the proportion of fondant to fruit. The practical advantage of this for certain types of goods will be appreciated. In addition to this point of advantage, the fruit may be used in a somewhat drier condition at the time of dipping, thereby making the fruit more easily handled at this stage.

Invertase is already in commercial use for producing cordialized fruit centers.

Checking Fermentation of Centers

Another advantage of the use of invertase lies in the fact that it greatly reduces the tendency of cream centers to undergo explosive fermentations. Such fermentations are due to the growth of yeast or bacteria in the sirup films surrounding the sugar crystals. These organisms produce gas, and the evolution of this gas causes the bursting of the cream centers and chocolate coating. Now, it is a well known fact that yeasts and bacteria do not thrive as well in heavy sirups, and the heavier the sirup the more difficult it is for the yeast or bacteria to grow therein. Here again the action of invertase in causing an increase in the total amount of sugar which is dissolved in the sirup film may be turned to practical advantage. As a result of the action of invertase the thickness or density of the sirup films is so increased as to make it practically impossible for yeasts or bacteria to thrive therein.

Cook Higher and Save Time in Starch

In conclusion, I will mention briefly another way in which the action of invertase is of practical advantage. This relates to the temperature to which sirup is boiled or cooked prior to creaming. As you are aware, the lower the temperature the greater the amount of water which remains in the fondant. However, when the fondant is remelted and run into starch molds, a considerable amount of water is eliminated from the fondant and absorbed by the starch. Starch, as you know, has a very great capacity for absorbing moisture. In fact, the removal of a certain amount of moisture from fondants made from low-boiled sirups is essential, in order that a crust may be formed and the fondant pieces rendered firm enough for subsequent handling. This necessitates allowing the fondant pieces to remain in starch molds for a considerable period, and not solely for the purpose of waiting for the fondant pieces to cool but also for the purpose of waiting for sufficient moisture to be eliminated to render the fondant pieces firm enough for subsequent handling.

Now when invertase is employed it is possible to raise the cooking temperature of the sirup to such a point as to permit the fondant pieces to be removed from starch as soon as they are sufficiently cool—say in one-half to one hour. At the same time, owing to the action of invertase in converting sugar into invert sugar, the fondant centers may be made even softer than when the sirup from which fondant is made is cooked to lower temperature and no invertase is used at all. This results not only in producing a softer center, but also saves time and increases factory capacity, fewer starch molding-boards being required for a given rate of output. In addition, since the starch does not have to absorb so much water it does not need to be redried so frequently.

You will note that when invertase is used, invert sugar is produced in the fondant after manufacture of the goods is completed. The manufacturer may therefore transform his ordinary sugar into invert sugar in the easiest possible manner and at any rate and in any proportion desired, the change being com-

pleted during any time period required prior to actual consumption of the candy.

I trust that the foregoing discussion has been of interest to you, and I hope that I have demonstrated that chemistry can be of real practical and constructive assistance to the confectionery industry, as well as to other industries. You will note that I have confined my discussion to fondant types of candies. There are, as you know, many problems relating to manufacture of other types of confectionery, and I have no doubt whatever that the application of chemical principles will be adequate to find practical solutions for them.



Candy Credits

(Continued from page 27.)

the customer, when he is refused discount that he has not earned.

These things are not impossible of attainment. There are concerns represented here this afternoon, who have made conspicuous successes by following just these principles.

No man or firm should be engaged in the confectionery industry, who does not have the good of the industry, as a whole, at heart. There is no wider field for good, hard educational work in the industry, than in "the field of credit." Let it also be said that there is NO field in which results from work done will be more quickly apparent.

I urge you to give the subject your earnest consideration and hearty co-operation; so that "Candy Credits" will keep step with the march in progress of the other phases of our great industry.



The N. C. A. Exposition, Municipal Pier



From Cherries to Chocolate

YOU remember way back when practically all dipping fruits were imported and about 50 per cent of them fermented in the finished goods because they were improperly cured! Needless to say those were the days before Joe Weaver ushered in a new epoch in the candy industry, as far as the use of fruits is concerned.

And now it's cherries to chocolate. Mr. Weaver has severed his connection with Crown Fruit & Extract Co. after a long and faithful service and is now asso-



ciated with A. Milton Mullens as western representatives of Runkel Brothers, Inc., with headquarters at Chicago.

Joe has more friends to the square mile among candy manufacturers and allied interests from coast to coast than any other man we know of in this industry. He has the true constructive pioneer spirit, the kind that "moves mountains" if need be to reach a right objective or be of service to his friends.

Joe is a charter booster for this publication and helped to organize the original editorial schedule and place the first assignments. We are sure that our readers join with us in wishing him more than the usual share of pleasure and profit in his new business connection, for Joe Weaver is a real asset to the candy industry.

One of the old pioneer candy manufacturers, Edward Kimmel, formerly connected with the Frank A. Menne Factory of the National Candy Company, Louisville, Ky., passed away June 1st.

The Helen Ardelle Co. has purchased a new building for their headquarters in Seattle, Wash. They are remodeling the building and will make it into an attractive office home.

The Fletcher-Wilson Company of Nashville, Tenn., are adding another story to their plant. They are manufacturers of the product known as "Hey, Hey."



Has Your Package Business Fallen Off?

Not so with our customers who have long since recognized the superiority of our product and are now reaping the benefit.

Each H. Schultz-made container is a silent salesman whose name is not on the payroll.

Let us help you boost your candy sales.

H. SCHULTZ & CO.

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Largest
and Oldest
in Chicago



Repeal of the Candy Excise Tax

(N. C. A. Bulletin June 4, 1924.)

The Revenue Act of 1924 which repeals the Candy Excise Tax was signed by the President on June 2nd and is now therefore the law.

The provision relative to the repeal of the Excise Tax will become effective on July 3rd, thirty days after the President signed the Bill. **No tax should be paid on shipments made on and after that date.**

It will not be legal for you to withhold invoicing shipments which are made the last two or three days before the repeal becomes effective. In other words, the tax must be paid on shipments made on June 30th, July 1st and July 2nd, even though they are not invoiced and charged on your books until July 3rd. You cannot avoid the payment of the tax on such shipments by merely withholding the invoicing of the shipments until July 3rd and charging them on your books on that date. The title to the goods passes when the shipment is delivered to the forwarding lines and the sale has been consummated at that time. The invoicing is merely a clerical detail and has no effect upon the date that the sale actually took place which was the date of shipment.

The use of the printed or stamped notice on your invoices to the effect that a certain percent-

age of the invoice price represents the tax, and the notice relative to the prepayment of freight on certain shipments should be discontinued on all invoices after July 2nd.

If the tax or freight notices are printed on your invoices, new invoices without the notice printed thereon should be ordered as soon as you can conveniently do so.

If you continue to use the old invoices on which the tax or freight notices are printed, the notices should be "crossed off" or "blocked out" in some manner that will clearly indicate that they are inoperative.

We will send you a summary of the other important provisions of the Act as soon as it can be prepared.

(Signed) WALTER C. HUGHES, Secretary.

A Few Excerpts from the Secretary's Report

by Walter C. Hughes

Trade-Mark Services

THE past twelve months have shown an astonishing increase in the number of inquiries received relative to trade-marks, copyrights and patents.

We are very much pleased at this evidence of the approval of the work that we are doing in this connection.

We have filed a large number of applications for the registration of trade-marks.

We have been instrumental in settling numerous disputes that have arisen between members relative to the joint use of trade-marks. These settlements have saved the members a large amount of money, and in every instance they have been accomplished through the broad-minded attitude of the parties to the controversies and their willingness to give as well as take, which is the real spirit of co-operation.

The ever-increasing number of registered and unregistered trade-marks used in the Candy Industry has made it an extremely difficult matter for a candy manufacturer to select a name or trade-mark for any special kind of candy that does not conflict with some other manufacturer's trade name or trade-mark.

The inadequacy of the trade-mark law has long been apparent to members of the legal profession who are specializing in trade-mark, copyright and patent litigation.

The American Bar Association, realizing the imperative need of a thorough revision of the law, appointed a committee composed of leading members of the Bar

to draft a bill to be introduced in Congress, which would remedy the defects of the present law. That committee, after many months of painstaking labor, has at last completed its work and has embodied its recommendations in a bill which has been introduced in the Senate.

One of the most important features of the bill is an entirely new provision which would permit the owner of a trade-mark, upon the payment of a fee of \$2.00, to "deposit" the trade-mark in the Patent Office.

This would not constitute registration but would protect the owner's right to its exclusive use, and no action, suit or proceeding of any kind could be maintained for an alleged infringement if the trade-mark had not been either "deposited" or registered. If a trade-mark is not "deposited" within one year after the bill is enacted into law, or one year after the first use of the trade-mark, the owner is penalized by being required to pay a very much larger fee for having it registered if at any later date he should decide to file an application for its registration.

This provision was included in the bill for the purpose of compelling the trade-mark owners to either "deposit" or "register" their trade-marks, and thus in time there would be a complete record in the Patent Office of all trade-marks of any importance or value to their owners, and it would avoid the annoying condition now prevailing of being unable to ascertain whether a trade-mark is being used unless it has been registered in the Patent Office.

The bill also provides that if the owner of a trade-mark has used it in a limited territory, he may register it in the Patent Office for the territory in which it has been used.

This is a very important provision and is an effort to put in a statutory form the decisions of the Supreme Court, thereby recognizing territorial rights in trade-marks.

There are now three bills pending in Congress relating to trade-marks and patents. Trade-mark attorneys do not seem to be agreed as to which one of these bills would be the most effective in eliminating the objections to the present law. Certain groups of attorneys are working for each bill. It is therefore, very doubtful whether any one of these bills will ultimately be passed. There is need of reform, but it looks as though we would not have it at this session of Congress.

I urge our members to give serious thought to the recommendation of our Trade-Mark Counsel that all applications for registration of trade-marks should be filed through the Secretary's office which, as stated in the Trade-Mark Counsel's report, serves as a "clearing house." If this were done, there would be less probability of a conflict between members over the use of the same trade-mark, and the necessity of filing notices of opposition would be materially lessened and expensive litigation would be frequently avoided.

Net Weight Regulation Conference

Having asked the officials of the Bureau of Chemistry, Washington, D. C., for a hearing relative to the regulation that has been issued by the Bureau, requiring the net weight to be shown on wrappers of stick candy and candy bars, we were given that privilege on November 23rd.

Mr. Hickey and I appeared before the officials of the Bureau on that date and presented our arguments, setting forth the reasons why the regulation was unfair and practically inoperative because of the inability of the manufacturers to technically comply with it. Mr. Hickey argued the question from the legal viewpoint, and I presented the arguments from the viewpoint of the manufacturer.

He contended that wrapped stick candy and wrapped candy bars were not "food in package form," as referred to in the law and the regulations.

We had numerous samples of various kinds of candy bars and wrapped stick candy and other food products which are customarily wrapped in a similar manner, such as wrapped grapefruit, oranges, lemons and apples. It was our contention that if wrapped stick candy and candy bars were "food in package form," wrapped fruit was also "food in package form" and that it would be necessary to indicate the net weight or the net count of the fruit on the wrapper.

The officials of the Bureau insisted that manufactured products should not be compared with natural products, such as fruits, and that while it was not necessary to indicate the net weight or count on the wrappers containing fruit, it was still their opinion that it was not an unreasonable regulation to require that this should be done on wrappers of stick candy and candy bars.

They maintained that if they were to make an exception as to stick candy and candy bars, it would also be necessary for them to include a number of other kinds of similarly wrapped food products, and if such exception were made, that the efficient enforcement of the Pure Food Law would be well-nigh impossible.

There is, therefore, no other alternative than that of bringing a test case in the courts.

It is, therefore, necessary that the net weight should

be shown on the wrappers of candy bars and stick candy weighing more than one-half ounce.

The Sale of Scheme and Prize Packages

I have had a great deal of correspondence with our members and Secretaries of affiliated organizations relative to the elimination of certain kinds of scheme and prize packages.

The popularity of such packages or schemes rests solely on the fact that they appeal to the gambling instinct in little children, especially the children of the poorer classes, whose pennies are not a matter of such frequency that they can easily resist the temptation to get "something for nothing."

They do not know that ninety children must be robbed in order that ten may receive extra value for their pennies through the medium of such disgraceful gambling devices.

Scarcely a day passes that the Secretary does not receive information from some member relative to a new scheme or package of this kind that has just been placed on the market; the market is literally flooded with packages of that kind.

The trouble about the whole proposition is that a great many of our so-called prominent members sell such packages and they will not discontinue their sale until a Federal Law is passed which absolutely prohibits the sale of such goods.

The Federal Anti-Lottery Law will not reach cases of this kind unless a continuous and conclusive connection can be established between the manufacturer and jobber or the retailer. We have taken this matter up with the Department of Justice in Washington, and have been given to understand that there is practically no hope whatever of being able to accomplish anything through the operation of the present Federal Laws.

We must, therefore, look to the State statutes and Municipal laws. Practically all of the States have laws which prohibit their sale. A great many cities have ordinances also prohibiting their sale. Their enforcement, however, is a local proposition and it is necessary for someone locally to take an interest in the matter and be willing to secure evidence and start action against the offending retailer, or otherwise nothing is accomplished.

In this connection, splendid results have been obtained in Massachusetts and New York through the work of our members in those States. I urge our members in all of the other States to follow the good example set by the members in those two States.

It is sometimes necessary to make a personal sacrifice for the maintenance of a right principle. We will make no progress in the elimination of schemes and packages of this character until we are willing to sacrifice the temporary gain from their sale for the fundamental principles of truth and honesty and square dealing, and the protection of the little children whose credulity makes their sale possible.

What the industry most needs in every State is a Vigilance Committee of serious minded men who will take the time and put forth every necessary effort to bring to justice each and every retailer who offers such schemes or packages for sale.

Then, and not until then, will they be eliminated. We may not be able to make the industry "lily white" or "99.44% pure," but we can at least make it free from the condemnation of right thinking men.

I hope, therefore, that some action may be taken at this convention which will bring about a uniform movement throughout the United States which will ultimately result in the entire elimination of all kinds of chance and gambling devices used in connection with the sale of candy.

Conveyors Pay for Themselves in 16 Months

Save \$3,370.52 Annually in Samoset Plant

By Relieving Congestion and Saving Floor Space and Trucking Labor, They Increase Profits \$3,370.52 Annually

An Official Survey of the Efficiency of Mathews Conveyors
Made by The A. C. Nielson Co., Chicago

By A. A. Gruhn

Supt. Samoset Chocolate Co., Boston, Mass.

Foreword

CANDY manufacturers will be interested in a conveying method which has added \$3,370.52 to the annual profits of the Samoset Chocolates Company.

In their plant the filled boxes are conveyed from the upper floors to the stockroom on the second floor by means of three Mathews systems. These conveyors handle between 4,500 to 6,000 boxes daily.

In direct trucking labor they have saved the wages of two men. By removing the boxes as rapidly as they are tied, the Mathews conveyors have increased the production of the workmen 10 per cent.

The use of trucks would require 600 sq. ft. of additional floor space, which would be worth \$390 a year. The total gross annual saving of \$3,765 is about 9½ times the annual operating cost.

A complete description of these profit making methods is given herewith by Mr. A. A. Gruhn, Superintendent of the Samoset Chocolates Company.

WHEN our factory was built, about four years ago, it was equipped with Mathews gravity conveying systems. We manufacture all kinds of chocolate candy, and nearly all of it passes over our three Mathews conveyors. These systems carry 4,500 to 6,000 boxes daily from the workrooms on the third, fourth, fifth and sixth floors to the stock tables and stockroom on the second floor.

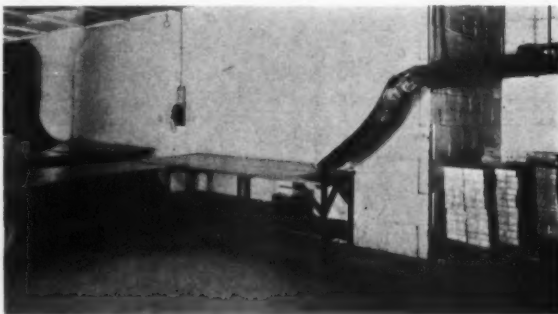
On the sixth floor the chocolates are dipped on the enrobing machine, packed in 5-lb. bulk boxes, tied, and fed to the first Mathews conveyors. This consists of a 4-ft. steel roller section on which the boxes are placed. After leaving this section, they travel on a spiral chute to the third floor, where another steel roller section, about 15 ft. long, is used to reduce the speed.

Can Receive Boxes at Each Floor

Another spiral chute conveys the boxes to the second floor where they travel over a steel and wooden roller section onto the stock table. The function of the wooden rollers is to increase the speed of the boxes before delivery to the stock table. This conveying system has an opening at each floor for receiving boxes.

A second Mathews system, which is composed of similar units, conveys boxes from the hand dipping and packing room on the fifth floor to the table in the stockroom on the second floor.

Require Practically No Attention



Mathews Conveyor System automatically carries 4500 to 6000 boxes daily from the work rooms on the 3rd, 4th, 5th and 6th floors to the stock tables and stock room on second floor.

The third Mathews conveying system handles the fancy boxes, which weigh from 1 to 7 lbs. These are packed in light paper cartons, each containing 1, 3, or 6 boxes. The Mathews conveyor handles these cartons from the packing room on the fourth floor to the stockroom. It utilizes one spiral chute in common with the second system.

We are very much pleased with the operation of our Mathews conveyors. They require practically no attention, and assist very materially in handling the work. Their greatest value lies in their ability to get the finished stock from the workroom easily and quickly, thus keeping these rooms clear and the workers free from interruptions.

Production of Workers Increased 10%

Without the Mathews systems, the stock would have to be moved by trucks. This would occupy considerably more floor space and cause congestion and delays, which would be especially objectionable during busy times. The boxes would accumulate on the tying tables, where

Report of a Survey of the Conveyor Systems in use by Samoset Chocolate Co. (continued).

they would have to await the arrival of a truck.

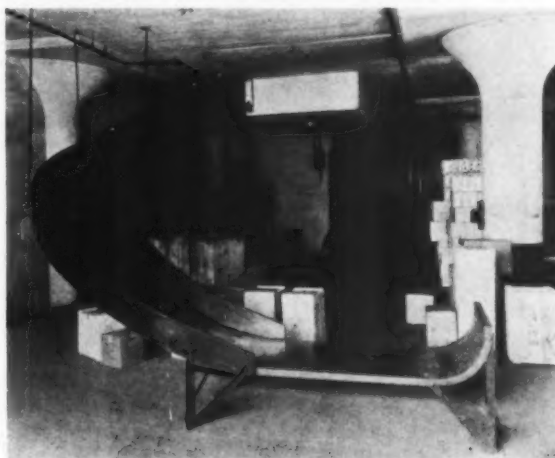
The Mathews system, on the other hand, permits removal of the boxes as soon as they are tied. This keeps the tying tables clear and makes the work continuous. As a result, each worker ties, on the average, at least 10 per cent more boxes, which saves \$675 per year in labor.

Net Saving Is \$3,370.52 Annually

The total saving in labor and floor space amounts to \$3,765 annually. Against this we have to charge the operating cost of the Mathews conveyors, which is very small. As shown on the attached cost sheet, the total cost of these systems is only \$394.48 per year, or \$1.31 per working day. Deducting this from the gross saving, there remains a net annual saving of \$3,370.52, which repays the entire original cost of the three systems in less than 16 months.

Our chocolates, packed in the finished boxes, are handled very satisfactorily by the Mathews conveyors, and with no damage whatever to the stock. The Mathews Gravity Carrier Company gave us very good service and engineering assistance when these conveyors were installed.

The following is a summary of costs and savings:



Mathew's Gravity Shutes in Samoset Plant.

Eliminate Two Truckers

The Mathews system also eliminates trucking which would require the time of two men. The saving in wages amounts to \$2,700 a year.

If trucks were used, we would have to set aside at least 200 sq. ft. of floor space on each of the three floors—the third, fourth and fifth. This would be necessary not only to make room for the trucks themselves, but also to provide table space for stacking the boxes. On a rental basis, this space would be worth at least \$390 a year.

Cost of Operation of Mathews Conveying Systems

Depreciation—\$5,400 ÷ 25 years.....	\$ 216.00
*Average interest—26 x \$5,400.00 x .06.....	168.48
<u>25</u> <u>2</u> ..	
Maintenance and repairs.....	10.00
Total annual cost of operation.....	\$ 394.48
Cost per working day.....	\$ 1.31

Savings Effectuated by Mathews Conveying Systems

Labor for trucking—2 men x \$1,350.00.....	\$2,700.00
Saving in labor at tying tables—5 x \$1,350.00 x .10	675.00
Value of floor and table space saved—200 sq. ft. x 3 x \$65.....	390.00
Total saving per year	\$3,765.00
Cost of operation	\$ 394.48
Total net saving per year	\$3,370.52

*Allowing for interest earned by depreciation reserve.



The perfect arch insures the strength

The Strong Arch---the Margin of Safety to Goods Shipped in Mid - West Boxes

As the simple arch of the railroad culvert, unnoticed and unsung, is the key to the lives and safety of the thousands of human beings who flash over the steel rails above by day and by night, so the high, strong, resilient arch construction of the corrugated fibre board in Mid-West shipping boxes absorbs shock, pressure and vibration that tend to damage or destroy shipments of goods in transit.

The Mid-West box offers a 30% to 70% greater margin of protection which, translated into dollars and cents, proves conclusively the startling difference between a box made less for utility than profit—and a Mid-West box, embodying the finest materials and designed for maximum protection.



The increasing use of Mid-West Boxes in your field is entirely due to their filling a need—BETTER.

THREE DISTINCTIVE MID-WEST FEATURES

Waterproof Container: Is everything its name implies.

Triple Tape Corners: Stop tapes from splitting and peeling.

Offset Score: Insures tight closing contact of end flaps.

Buyers! A close, comparative check-up on the performance of cheap, low cost boxes and the Mid-West product will make it easy for you to specify the Mid-West box, the safer, better box, on your next order.

Give the Mid-West box a tryout and see what it will do. One of our engineers will call on you if you wish. No obligation.

Our "Perfect Package" Data Sheet is free on request

MID-WEST BOX COMPANY

GENERAL OFFICES

18TH FLOOR CONWAY BLDG.,
CHICAGO, ILL.

CORRUGATED FIBRE
BOARD PRODUCTS



FACTORIES

ANDERSON, INDIANA
KOKOMO, INDIANA
CHICAGO
CLEVELAND, OHIO
FAIRMONT, W. VA.

Y

NA

VA.